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ORIGINAL LECTURES.

AMBULATORY AUTOMATISM.

A Clinical Lecture delivered at the Salpètrière, Paris, Department of Nervous Diseases.

BY PROF. CHARCOT.

GENTLEMEN: You have before you to-day the patient whom you saw three months ago; his history, a very interesting one, is as follows:

Man, thirty-seven years, porter by occupation. In March, 1887, he leaves his home at 8 A.M., suffering from headache, to carry a parcel to one of his master's customers, living about two miles from his home. He takes a car, and stops exactly before the person's house, and even remarks that the person has her address written on the door, but did not go in. Remark well, gentlemen, this is the beginning of a series of incidents which will present themselves successively. It is a very rare fortune to observe such singular phenomena as those before which you find yourself to-day.

Our patient has found the number of the house where he intends to go, but from this moment his remembrance disappears, he is absolutely in the dark. After having reached the house, the next fact he recollects faintly is that he was about four miles from that last place, where he had no business; the next recollection he has, is that he found himself on a bridge, about two miles away from the last place. Remark, he thinks he found himself there, but he is not certain. This is interesting to note, for the disease we think that man is suffering from, presents as a principal symptom, amnesia. But this amnesia may not be complete, and certain vague remembrances might appear here and there.

From the moment the patient found himself on the bridge he walked continuously, until he awakened four miles from that place, at 10 P.M.; that is, he probably walked fourteen hours. During that time his behavior must have been very correct, or else policemen would have arrested him. He must have had his eyes wide open, or else he again might have been arrested. So, he must have conducted himself as you and I; but he was not the less irresponsible and unconscious; and the only points that he remembers during these fourteen hours are, that he was four miles away from his first place of business, then on a bridge, and finally awakening in another part of the city at 10 P.M., where he found himself exhausted, and his boots all worn. He does not remember having taken breakfast, or having spent any money. After having awakened, he went home quietly, and when he reached his home he found himself covered with dust, but no trace of having fallen. The next day he did not feel overfatigued.

From the 15th of March to the 30th of July he worked steadily. On that day he was ordered to take a parcel to a customer. He took a car, and delivered perfectly well what he was charged to do. He then, being very near the place where the "900 feet Eiffel Tower" is being built, thought he would go and see the works. He remembers to have seen the statue of the tower at that time, but from that moment he is again plunged in the dark. He remained two days and two nights without knowing what he did during that time; he finally threw himself into the river Seine, and awakened at that moment. During his sleep he bought a few cents worth of tobacco and a railroad ticket for a short distance. He only had twenty cents in his pocket before he was thrown into this unconscious state.

So you see, gentlemen, how are you going to know when you have a man walking by the side of you whether he is awake or asleep? If there were many people like him it would not be very reassuring to travel. For this man entered a railroad station, took a ticket for Berry, he deposited his money, took his change, received the ticket, and went into the train. When the train crossed the bridge over the river, he threw himself into the water.

A strange incident is the fact that his watch was at the correct time when he came to himself; he did not forget to wind it during this unconscious state. It is true, the same will occur to us. I often, when I retire, try to wind my watch over again, forgetting that I have already done it; he must have done it in a mechanical and unconscious way.

On August 23d he has another attack, he leaves his business house in the morning and goes to all the places he has to, except one. On his way he meets a friend, who asks him whether he could indicate to him a workman. He says he knows one, goes to that workman, and tells him to go to the said place. He then forgets to go home to breakfast; it is 11.30 A.M., his unconscious state begins.

He remembers only on the second day to have passed at Clays, which is twenty-one miles from Paris; he there enters a restaurant and orders a beefsteak, which he does not eat; but he does not know why he did not eat it. He remembers having paid twenty-five cents, but forgets whether he drank his coffee or not; on awakening he found he had put the sugar in his pocket. Then he becomes unconscious again, and he is awakened sleeping under a bridge nine miles from the preceding place. He himself is unable to say whether he slept or not. An amateur fisherman seeing him sitting on the border of the river, and looking steadily toward the river, asked him, "What are you doing here?" "I am looking." "At what?" "Well, I am looking at the Seine." After these questions, he asked the intruder what time it was, his watch having stopped, thanked him, took a car, and came back home.

You will not find, gentlemen, many histories similar to this one. We find here a pathological phenomenon which deserves to be discussed.

I have often asked myself what this singular state of

unconsciousness could be, which would occasionally strike this person for hours, or even days. If we could prevent this man from going about cities without any object in view, it would be a great comfort to him. I have thought, and will try to justify it, that the affection from which he suffers is of epileptic origin; it is the ambulatory form of automatism, an expression which I use to characterize this situation of walking automatically, without any external appearance indicating this automatism.

Remark, that we know very well in epilepsy the post-epileptic insanity. An individual has an epileptic fit, and, under the influence of terrible dreams, he becomes violent, he breaks everything, and he begins to walk; but he is soon arrested, and finds himself at the police station.

Those epileptics might murder some one, commit suicide, while our patient, if he had not been able to swim, would probably not have thrown himself into water. In this there are no traces of over-excitation or violence. In a general way, on the contrary, the terrible violence of the fits is one of the characters of post-epileptic mania; it is probable that we have not these conditions in this case, but they are probably the same series of phenomena under a different aspect. You know that in epileptic fits we distinguish the grand mal and the petit mal.

The words "petit mal" seem to indicate a lesser degree in this affection than grand mal. This is a false idea. It is only apparently a lesser affection, in reality it is not. It has the same consequences that the grand mal has, and sometimes it is even more grave, in a prognostic point of view. Generally we divide it into degrees. The individual who speaks with you suddenly becomes pale, his speech stops, he becomes unconscious for a moment only. If he has anything in his hands he might let it fall, after a few moments his consciousness is restored, this is what we call absent minded. After this comes the vertigo. The patient has the sensation of something turning around him, or that he is himself turning. There may be, in addition, certain movements in the lips which represent convulsive attacks, which are the initial characteristic of the epileptic attack. One employs wrongly the term vertigo to express the state of certain patients who become unconscious without having the vertigo sensation, but who have few convulsive movements.

These attacks of petit mal, I have said for a long time, are as serious in character as the grand mal, in which the patient bites his tongue, the consequences are as serious in regard to the psychical phenomena. One often sees, after an attack of petit mal, the patient rise, make a few steps—speak out single words, always the same during the fit. I knew one, who, on every attack, would continuously say, thirteen, fourteen, fifteen, then begin to walk, in an apparently normal condition. A minute later, all was over. This is the germ of the ambulatory fit. Prolong this state in your mind, and you shall have the picture of the history which this patient has given us, admitting my diagnosis to be correct.

You will find many descriptions of this phenomenon in different works. It is called automatism, and if you want to read something interesting in this respect, I recommend you the paper of Mr. Jackson, of London, on the subject of ambulatory automatic fits, not accompanied by emotions, anger, or violence, and which have such an analogy to the phenomenon of natural somnambulism, that it is questionable whether any difference in the symptoms can be established between these two groups of natural somnambulism and comitial somnambulism.

You often have heard said that epileptics after their fit will behave in a scandalous manner. One will undress himself entirely, as did a professor of music, who, after having given a lesson, to a young lady, suddenly takes off his clothes.

Jackson also reports the case of a man who goes to a restaurant, eats and conducts himself perfectly. He pays, comes home, but does not remember he has gone to the restaurant, and has no sensation of hunger. This case is mentioned as remarkable. Our case has remained two days unconscious. These cases are exactly similar, except that in Jackson's case unconsciousness lasted three or four hours, while in ours the patient remained two or three full days absent minded, behaved very well during that time, which prevented him from falling into the hands of the police.

I have thought it was a case of comitial automatism, but you will say, Are you certain it is not a particular case of somnambulism? I have admitted the comitial point of view, for if it is so, we can treat him. When I saw him for the first time some months ago, he had just had his third attack; we have since given him a preparation containing bromide of potassium.

The first week we gave him 60 grains a day; the second week, 75 grains; the third, 90 grains; the fourth, 105 grains a day. The same treatment the following month. Then he had a fourth slight fit.

One morning he had headache in the left temporal region, and was delivering his goods; while sitting at the side of the coachman he begins to sleep, his companion awakens him. He delivers a parcel, but forgets how he did it. He returns to his business house, and his employer remarks a strange look about his eyes, he is unconscious while speaking to him. He has his eyes wide open. You know that in Macbeth, there is a very deep observation of somnambulism. The physician who is present, seeing Lady Macbeth rise and begin her somnambulic acts, addresses himself to the other persons on the stage, and cries out, "See, her eyes are open!" This is the great question to know, whether the eyes are opened or closed in somnambulism. Our man must have had his eyes open, for he spoke to his employer and also took a railroad ticket.

After having seen his employer, he again, with the same coachman, goes to another place, and complains to his companion of being very tired and very thirsty. When he returned home, he drank a great deal of water, and felt all over his body as if he had been beaten This attack lasted only three hours. After his fits he will sometimes recollect facts which have produced themselves during his unconscious state.

In cases of epileptic fits with violence, we generally say that patients have absolutely forgotten what they have done. This is usually the rule, but there are contrary examples. I remember a case in which a man, after an epileptic fit, had broken everything in his house. The wife and everybody else had run away. He then went out of the house, out of the city into the country, where he shortly awakened, forgetting all that had occurred. He then returned home, and found everything broken, and was greatly surprised to hear that he did the

mischief. He told me afterward that he now thought he had dreamed he had broken everything in his house. You note here, the remembrance of the accomplished act in presence of the results. It is certainly a phenomenon of the same order which makes this man before you to-day remember that he ordered a beefsteak which he did not eat. All this remains in the mind, as a dream, without the memory of the accomplished acts.

But you will say, Is it epileptic; is it not natural somnambulism? There are clinical differences, but there is a resemblance in the form.

Natural somnambulism, as it is called in opposition to artificial somnambulism produced by hypnotism, is a disease of youth and first childhood. It is rare to see it manifest itself in adults or old age. The somnambulistic acts also take place at night, and ordinarily we do not observe the patients at that time, so we have to rely on what parents will tell us about it.

A few minutes ago I was mentioning a passage of Shakespeare, who has shown himself to be a very deep observer in medical subjects as in many other questions. He has given the same definition of natural somnambulism as Joseph Franck. This meeting of the poet and medical man is a curious one.

Shakespeare says, in Macbeth, to define the state of Lady Macbeth:

"A great perturbation in nature! to receive at once the benefit of sleep, and do the effects of watching."

What does Joseph Frank, the physician, say?

"Somnambulism is a perturbation of nature in which the patient has all the appearances of sleep, and yet does all the acts which are done when awake."

If I should wish to define the mental state of our patient, I would say it is that of an individual who appears to sleep, but who behaves as you and I conduct ourselves while awake. He has certainly some strange ideas – to throw himself into the river, for example; but he nevertheless seems to act with reason, and yet he sleeps; his consciousness sleeps; and when his normal life returns he forgets what has occurred during his sleep. We have here a case of somnambulism, or noctambulism, if you prefer. One of the characters of somnambulism is to be nocturnal. Usually somnambulism will nearly always manifest itself at the same hour, midnight, or 1 A.M. So there are children seen to walk in their room, accomplish certain acts, study their lessons for school, etc. I have never heard of a diurnal (daytime) somnambulism, and should I hear of it, my first thought would be that it was a case of comitial somnambulism.

We have here a patient whom you already know, and who presents all the symptoms of natural somnambulism. She is an hystero-epileptic; but I say she is a natural somnambulist with a certain doubt. This patient rises at 2 A. M.

The following are the principal incidents of her somnambulistic life, and the circumstances which make me doubt whether it is natural somnambulism, or whether she is not epileptic. The case was a very interesting one for me to study, for while we have here a service of two hundred epileptics, I had never for the last thirty years I have been connected with this hospital, heard of a case of natural somnambulism present in this house.

My students decided to pass the night to watch her. They saw her rise, and followed her in all her doings, until she returned to bed again. They have made some very interesting observations, so much the more so because it is a difficult matter to get an accurate description of these cases. They saw her leave her bed, jump out of the window, which was nearly on a level with the ground, pull a little working carriage which was in the yard, try to go out by the back door of the hospital, finding it closed, she went up on a wall, and began to run on it without falling.

Another night, the door having been left open purposely, she walked out into the garden and cut some dry stems of plants, of which she made a bouquet, which she took back to her ward, went to bed again, with her eyes *open*.

Shakespeare, in a *Macbeth* scene, says: "Her eyes are open." It is a very interesting observation, coming from a writer who is not a medical man; one might think he intended giving to the nosologists a lesson in pathology. He observed one of the principal symptoms of somnambulism, after having given a definition exactly similar to the one of Franck.

I have asked myself whether in natural somnambulism there are no somatic contractures, and whether there exist any difference in this respect between natural and artificial somnambulism. We have found none of these contractures in our female patient, who can be placed in a state of artificial somnambulism with contractures.

The somnambulist patient has his dream, his idea, he will do it, and will omit all which is not in his programme. If you place yourself before a patient in somnambulism, he will pass on the right or left side of you, not paying any attention to you, who are not present in his dream. It is said that Stuart Mill, while thinking of some philosophical subject, would often forget himself in the streets of London, not seeing the persons going by, absolutely a stranger to the outside world, and yet walking in a very natural manner; during that time he belonged absolutely to his mental education. It is a singular faculty not to see what does not interest you. And yet, if we examine ourselves, we find that not one of us has not gone up a stairs, arrived at a door, opened it, thinking of an entirely different subject. So it has been from the time of Hippocrates down to our days, we do not see our diseases, we are unable to see them. All the physicians have walked in the midst of locomotor ataxia down to the end of this century without seeing it; they have not seen multiple sclerosis; five years ago, I saw for the first time the hystero-traumatic paralysis.

I am not certain that in our patient we have to deal with natural somnambulism, because our patient is an hystero-epileptic with separate crises. In general, we never find epilepsy in our somnambulistic patients, but oftener hysteria.

To come back to the patient before you, to justify the diagnosis in these cases is always a difficult matter, on account of our superficial knowledge of the disease.

There is no case of epilepsy, whatever its form, which does not justify at least the temporary use of bromide of potassium; and if the patient is not cured, we at least find a beneficial influence of the drug. It would be important to know whether in this patient there is anything comitial which has any relation with the ordinary type.

The history of his family is a good one; no traces of nervous disturbance can be found. When a child he always felt perfectly well, has had no convulsions, nor indications of any nervous disorders.

A few minutes ago, I was speaking to you of psychological equivalents to the convulsive attacks. In general they are post-epileptic accidents which follow a fit of epilepsy, or vertigo, or an absence of mind. Sometimes the fit can be suppressed, and yet the ambulatory act can be produced. It would be a case of this kind, in presence of which we find ourselves to-day. I am not certain, however, that there is not here a slight vertigo.

I know an architect who consults me very often. He has frequent absences of mind. He enters a car desiring to go to a certain place. He will pass that place and awakens when the car arrives at its final station. These are post-comitial phenomena.

In regard to our man, I think after all the considerations I have unfolded to you, that we have to deal with a particularly remarkable case of comitial disease, or ambulatory automatism. It is the first time that I have seen an affection of this kind with such clearly pronounced symptoms, you will find no more interesting ones in your nosological descriptions. This man will continue his treatment, as he has done up to now. He will take 75 grains of bromide a day for a week, then 90 grains for a week, the 105 grains the third week, and then over again; and he will report in three months from to-day.

ORIGINAL ARTICLES.

AMBLYOPIA BRIGHTII VERSUS RETINITIS ALBUMINURICA.

BY D. C. COCKS, M.D.,
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THE recent paper by Dr. Pooley, of New York, read before the New York Academy of Medicine January 19, 1888, revives a subject that although a permanent part of the literature of medicine, yet is so seldom referred to that its existence is often forgotten. I refer to the fact that failure and even complete loss of sight may occur in Bright's disease without any changes in the retina or choroid.

Every third course student has heard of neuro-retinitis albuminurica, but the writers of some of our text-books have forgotten to mention that there is an amblyopia Brightii unattended by lesions of the fundus oculi. In view of these facts I have thought proper to refer to a few cases that have occurred in my practice illustrating this particular symptom of Bright's disease, and by way of contrast will give the history of a case of retinitis albuminurica, hoping thus more forcibly to impress the fact of the existence of amblyopia Brightii without ocular lesions.

CASES OF URÆMIC AMBLYOPIA WITHOUT OCULAR LESION.

CASE I.—A few years ago I was called to see a youth about twelve or thirteen years of age, who had been seized with convulsions of an epileptic character and due as I afterward found, by an examination of his urine, to acute Bright's disease. He had been sick for several days, had had nausea, headache, vomiting, and scanty urine, followed by the convulsion for which I was called. When I arrived he had partially aroused from the stupor which always follows these attacks and was complaining that he could not see. The following day I made a careful ophthalmoscopic examination: his sight was entirely gone, he could not even perceive the light thrown by the mirror of the ophthalmoscope. The pupils were dilated widely, but the fundus of each eye was normal. On the closest examination, as this was my first case, I could not find any organic lesion in the retina, choroid, or nerve. This state of eyesight continued for about thirty-six hours, then perception of light was noticed, then objects indistinctly, and finally *perfect* sight was restored. I saw him quite a while afterward, but there had been no further trouble with his eyesight, and his kidneys had returned to their normal condition.

CASE II.—Mrs. M., aged forty-five, having previously enjoyed good health, was suddenly taken with intense headache, then failure of vision, slight delirium, complete loss of sight, and finally unconsciousness. Examination of the fundus oculi was negative, the urine showed abundance of albumen. She seemed to recover entirely from this attack, both as to sight and kidneys. One year after this she had a similar attack, not so severe however, and with a like happy termination. The duration of the amblyopic symptoms was about ten days.

CASE III.—Mrs. C., aged twenty years, pregnant for the first time (seven months), noticed slight œdema of her feet August 31, 1884; this increased, and her physician, Dr. Lyon, found her urine loaded with albumen. Uræmic convulsions having developed she was delivered by Dr. McLean while she was unconscious (uræmic coma). The following day she partially aroused from this unconscious state, and it was found that she was partially blind, being able only to discern large objects. I made an ophthalmoscopic examination and found no changes in the fundus, except possibly a slight œdema of the retina near the nerve. Three weeks after this her sight was perfect. She also recovered entirely from her nephritis.

CASES OF RETINITIS ALBUMINURICA.

CASE IV.—Miss D., German, aged twenty-five, always supposed herself to be in perfect health until January, 1885, when after exposure to wet and cold she noticed that her urine was scanty and high colored. Six months from that time she was seized with severe and constant headache, chiefly occipital, attacks of dyspnœa, œdema of the feet, and slight blurring of sight. These symptoms led to a careful investigation, when it was found that she had chronic Bright's disease, hypertrophied heart, and neuro-retinitis albuminurica. The eyes externally looked normal, the pupils were equal in size and responded readily to light; V. $= \frac{20}{xx}$. At times, however, she said that things looked hazy. The media—*i. e.*, aqueous, lens, and vitreous—were as transparent as in health.

The optic nerve was slightly swollen, its edges

were blurred, the retina had an indistinct look as if I was examining it through a thin veil, but the most striking appearances were two groups of white spots scattered over the fundus. The first group was to the temporal and upper side of the optic nerve, covering a space the size of the optic papilla; the second was grouped about the macula in a crescentic arrangement, looking as if spattered into it by a paint brush, the veins were slightly enlarged, but there were no marked changes in the arteries. This description answered well for both eyes.

From this examination a diagnosis of neuro-retinitis albuminurica was made. It was the second stage of the disease, and so characteristic was it that, taken with the persistent headache, swollen feet, and hypertrophied heart, morbus Brightii could have been predicted without a urinary examination being made. I do not mean to state that the changes in the retina were pathognomonic, because a few cases have been observed where this condition existed without kidney disease having been proved present, but I do mean that, when seen, the kidneys should be at once investigated; but when this appearance is accompanied by the group of symptoms named—*i.e.*, persistent headache, nausea, œdema of the hands and feet, hypertrophy of the heart—a diagnosis of chronic Bright's disease can almost positively be made, irrespective of a urinary examination.

These appearances once clearly seen even by the tyro in the use of the ophthalmoscope, would leave him not faultless if, seen a second time, they did not suggest an examination of the kidneys. In the first and last stages of albuminuric retinitis, the picture is not so distinctive or suggestive. In the first stage all that can be noticed is a fulness of the retinal veins, an increased redness of the nerve, which soon passes over into a decided neuro-retinitis (in a case now, February, 1888, under observation, there are a few feathery retinal hemorrhages, with no swelling of the nerve), the veins becoming larger, more turgid, the edges of the nerve are lost to view in the œdematous swelling of the connective tissue of the head of the nerve, and by the development of new bloodvessels. The retina is noticed to be dotted with minute white spots, both in the neighborhood of the nerve and the macula.

If the disease continues to progress beyond this point, these spots increase in size, and coalesce, covering the retinal vessels in their neighborhood, and thus form a uniform mass of exudation. At this stage, and even before, hemorrhages make their appearance; if these are small, they are situated in the retina, causing immediate damage to the sight, according as they are situated at or remotely from the macula, and, as a rule, slowly disappear by absorption; if large, they sometimes break through into the vitreous, causing immediate and marked failure of the sight, thus simulating the amblyopia without lesion.

Where the hemorrhages are in the periphery of the retina, their presence may cause no inconvenience to the patient, and may escape the observation of the physician, unless carefully looked for. The nerve may become very much swollen, as in a case now under observation, in which the apex of the nerve can be seen with + 7 D., the macula being emmetropic. If life is sufficiently prolonged, partial atrophy of the optic nerve may result. In favorable cases, as in morbus Brightii from pregnancy or scarlatina, where the patients entirely recover from their kidney trouble, a retrogression of the eye symptoms takes place, and if the nerve has not suffered too much from the swelling, and the hemorrhages have not involved the neighborhood of the macula, complete recovery may take place.

The greatest danger that menaces a patient sick with Bright's disease is uræmia. In other words, the patient is in danger of poisoning by the retention in the system, not of the urea alone, but of all the urinary salts, and of having developed in his body that train of symptoms which has been included under the term uræmia. This danger and these symptoms vary according to the condition of the patient at the time the symptoms are first noticed, and according to that part of the system on which the brunt of the attack falls. If the case is one of acute Bright's disease—in other words, if the patient's system has not been accustomed to the presence of urinary salts, except in the normal amount—a day or two may permit the most serious uræmic phenomena to be developed, the urea in the blood being only a fraction of that to be found in the blood of a patient sick with chronic "Bright's", who seemingly suffers no inconvenience from it. Uræmic symptoms will show themselves, then, in a given case, more or less acutely, according as the system has been accustomed to its presence or not, and according to the suddenness with which its elimination is stopped.

Where and when uræmic symptoms will first manifest themselves it is never possible to say; whether with dyspnœa, vomiting, deafness, amblyopia, delirium, or convulsions; in other words, whether some one nerve centre may be so strongly affected as to lose its function, or the whole brain be at once overwhelmed by the poison.

Uræmic amblyopia is a failure or loss of sight without any observable pathological changes in the optic nerve, retina, choroid, or refractive media of the eye, and is due to the poison of urea and other constituents of the blood acting on the intra-cranial centres of vision. In uræmia the loss of or failure of sight may be the first symptom noticed, and the other symptoms may readily follow, or we may have first the headache and then failure of sight, or we may have convulsions, and loss of sight be first noticed as the patient recovers from the coma. In this last instance the patient's mind may recover

sufficiently to express the fact that blindness exists, and yet memory be in abeyance, and on complete recovery no memory of loss of sight remain.

In regard to the onset of the amblyopia it is generally sudden, a few minutes or hours being sufficient to blot out all perception of light; but it may be first noticed as a fog between the patient and surrounding objects, which gradually deepens until sight is lost. In other cases the sight is often only slightly impaired, and that for a short time. In this particular it differs from diabetic amblyopia, which may be permanent. In regard to the duration of this trouble it can be stated that, as a rule, it develops suddenly, and disappears suddenly, exceptionally it is very slow in its progress. The prognosis is, as a rule, good, the sight being completely restored, and relapses are infrequent. I have no record of any case where vision failed to return if life was prolonged. In this respect it differs from albuminuria retinitis, as in this latter sight is scarcely ever restored.

The diagnosis of this condition is especially important. In all cases of sudden loss of sight where the ophthalmoscope shows no lesion, the urine should be examined both for albumen and sugar. I have no figures, nor have I been able to find any record of the frequency with which uræmic amblyopia appears in Bright's disease, but I believe that if all cases were carefully examined for this symptom, we would find it present in over forty per cent. of all cases, while neuro-retinitis occurs in about thirty per cent.; this last may be monocular or binocular, while I know of no recorded case of monocular amblyopia Brightii.

We have thus in the eye exhibited on a small scale the counterpart of the changes that take place extensively in other parts of the body in Bright's disease. The amblyopia is produced in the same way and by the same poison as that which produces headache, dyspnœa, failure of memory, delirium, and, finally, loss of consciousness and eclampsia; all of which symptoms show after death, no changes to account for their development during life. In the eye we can make ante-mortem examination and find the tissues of the retina and choroid normal.

Neuro-retinitis, on the other hand, is produced in the same manner as pleurisy, pneumonia, pericarditis, and cerebral hemorrhages. It is a part of the changes which take place in the vascular system. These two conditions, while totally distinct, may yet coexist in a given case, so that the failure of sight in commencing neuritis may be out of all proportion to the lesion found in the fundus.

I have redescribed these two symptoms of Bright's disease, not simply as curiosities, but because they are of the greatest importance to each general practitioner, as a failure to recognize the functional trouble, and the consequent erroneous prognosis as to the recovery of sight would react unfavorably on the practitioner; while, if its existence is appreciated, we may calm the fears of anxious friends by stating that if life is prolonged sight will be entirely restored; on the other hand, the albuminuric retinitis has been frequently the first symptom that has disclosed the disease back of it. It stands in many cases written out on the fundus as plain as if letters were there in place of the characteristic splashing produced by the fatty degeneration of the connective tissue of the retina; and here the prognosis as to recovery of sight is most serious, and as Bull and Gruening have so clearly proved, the prognosis as to life is most unfavorable.

Conclusions.—The amblyopia of Bright's disease is totally distinct from the loss of sight in retinitis albuminurica, the one being a functional disturbance of the centres for sight in the brain, the other a lesion of the interior of the eye itself.

That while they are often seen separate and distinct, as in the cases reported, yet that they may coexist in one and the same individual.

Every general practitioner should possess an ophthalmoscope, and thus be able to make a diagnosis himself.

A CASE OF PRENATAL, AND A CASE OF POST-NATAL PNEUMONIA.[1]

BY BARTON COOKE HIRST, M.D.,
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A FEW months ago I had an opportunity to study the case of a newborn infant that died shortly after birth from a pneumonia contracted *in utero;* quite recently I have seen an infant, apparently healthy and well developed when born, with no inherited disease, exhibit all the symptoms of a catarrhal pneumonia within a few hours after its birth, which proved fatal in the course of three days. The origin of the disease in the two cases, the clinical history of each, and the post-mortem appearance, contrasted so sharply the one with the other, that a brief description of these cases may indicate the distinctive features in an attack of pneumonia which begins and runs its whole course perhaps *in utero*, and one which is first developed immediately after birth.

CASE I. *Prenatal Pneumonia* (Philadelphia Hospital).—An Italian woman, æt. thirty-five, at the time of admission pregnant six months, having for a year past suffered from a large lumbar abscess constantly discharging pus, and exhibiting, during the time she was under our observation, all the signs of general septicæmia, gave birth to a living infant between the seventh and eighth months. The child was tolerably well developed for the period of pregnancy, but was deeply cyanosed, and evidently breathed with difficulty for the few hours that it remained alive. The post-mortem examination showed

[1] Reported to the Philadelphia Obstetrical Society.

no other cause of death than the condition of the lungs, which were as large as though they had been well inflated with air, but in their consistency, weight, and color, throughout all the lobes of both lungs, resembled a liver; placed in water, they sank at once. A microscopic examination showed an enormous overgrowth of fibrous elements, and a desquamative pneumonia in the air vesicles, which were compressed and distorted by the encroachment of the overgrown inter-alveolar connective tissue.

This would seem, therefore, to be the first stage of what is known later as "white pneumonia," when the lung substance has undergone fatty degeneration, and presents a peculiar appearance which is usually regarded as symptomatic of congenital syphilis. There may be cases, however, in which, it seems to me, such a condition might be found, although the possibility of syphilis were entirely excluded.

Geyl,[1] by a series of careful experiments, has shown that when the oxygenation of the fœtal blood is interfered with, the fœtus makes inspiratory efforts *in utero*, with the result of drawing into its lungs a large quantity of liquor amnii; and this author has further demonstrated that the presence of liquor amnii within the lungs, containing, as it does, lanugo, epithelial scales, urine salts, and perhaps meconium, is capable of exciting a catarrhal pneumonia.

Now, in any condition that interfered with the aëration of the mother's blood, or if from any cause the fœtal blood could not be properly oxygenated, there might be an attempt at pulmonary respiration on the part of the fœtus, resulting in catarrhal pneumonia, which ultimately, from the constant irritation caused by the desquamated epithelium and the solid particles held in suspension or solution by the liquor amnii, would bring about the overgrowth of connective tissue that characterizes a pneumonia arising *in utero;* this interstitial inflammation of the lungs, therefore, need not invariably be ascribed to syphilis.

Whatever the explanation of its occurrence, the diffuse nature of an inflammation of the lungs during intra-uterine life will usually be sufficient to distinguish the disease from the same affection arising immediately after birth.

CASE II. *Post-natal pneumonia* (Maternity Hospital).—A healthy young primipara fell in labor at six o'clock in the morning, a few weeks ago. With the first few pains the membranes ruptured, and the greater part of the liquor amnii escaped. At half-past six in the evening the os was dilated; at ten o'clock the child was born, slightly asphyxiated, but was soon revived. The mother stated from the first that the child breathed rapidly and refused the nipple; by the third day it was evidently quite ill, and its temperature was found to be 101°. My attention being called to the case for the first time, I found fine râles over both lungs, but no distinct dulness. From its history and physical signs, the case was thought to be one of pneumonia, from the inspiration of blood and mucus during labor. The child died upon the following day. In all the lobes of both lungs were found spots of solidification about the size of a chestnut, the remainder of the lung tissue being apparently healthy. The right auricle of the heart was enormously distended; the foramen ovale was almost completely closed.

Perhaps this form of pneumonia occurs more frequently than is commonly supposed after difficult or tedious labors, and it may be that many obscure cases of fatal disease in newborn infants might be explained if the lungs were carefully examined.[1]

[1] Die Ætiologie der sogenannten puerperal Infection des Fötus und des Neugeborenen, Arch. f. Gynäk., 1880, Bd. xv. S. 384.

WHAT IS A HOSPITAL CORPS?

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A QUARTER of a century of profound peace has largely rendered latent the costly knowledge which war taught us. A generation has grown since Appomattox put an end to our last and greatest conflict, to which its lessons are unknown; and to-day, should war be declared, it would find us almost as unprepared as in 1861.

Considering the fact that the regular army of the United States is but a nucleus around which the greater army of the people must crystallize when any war comes upon us; and accepting one of the axioms of warfare that the average soldier is made, not born, it behooves us to think, whether we have forgotten how to restore our nearly worn-out ploughshares and pruning-hooks to their original shapes. Quite as important is this question to us of the medical profession as to any other class, for the civil practitioner of to-day will, in event of hostilities, become the medical officer of to-morrow. To you, then, medical officers of to-morrow, is addressed this question, What is a hospital corps?

A leading article in THE MEDICAL NEWS of Jan. 28, 1888, states that a hospital corps has been organized in the United States army, and gives an excellent *résumé* of its plan and scope, but the fact that such organizations exist, and have existed for years in all the great armies of the world as an acknowledged factor of the utmost importance, is not generally recognized in this country.

The idea that a company, battalion, or larger body of men, marching in review, is complete in itself, and the final development of active service organization, would hardly now be entertained by

[1] Henoch, in his interesting book (Vorlesungen über Kinderkrankheiten, S. 338), refers to a "Schluckpneumonie" from the inspiration of milk while feeding, but says nothing in this connection about the inspiration of the discharges of labor. Schröder, however, in his lectures, was in the habit of referring to this subject at some length. Schultze has actually listened to the respiratory efforts of a fœtus in utero, and many others have heard the *vagitus uterinus*.

the merest tyro in the art of war. Yet such has been the belief amongst other nations, and such ideas doubtless obtain to-day among our own countrymen who have given, if any, only a passing thought to the subject.

The British army went to the Crimea without hospital corps, without field hospitals, with an untrained medical staff, with no systematic base hospital organization. The result, from a medical standpoint, which might have been anticipated, was utter failure, and the horrors of the Crimean winter of 1854–55 furnish the darkest episode in the history of that war. Our own experience in 1861 was identical, and the outcome would have been the same, had not the whole country risen in compassionate effort to supply the deficiencies in our army hospital arrangements. A glance at the records of the early part of the war, as published in *The Medical and Surgical History* thereof, must convince the most sceptical that in no direction were we then less prepared to cope with the immense problem which presented itself, than in the medical department. The conclusion was grand, but who can tell the amount of preventable suffering through which we passed to reach that conclusion?

One of the outcomes of this dearly bought experience was the organization of an ambulance corps, which served an admirable purpose during the latter part of the war, and with its close, except on paper, ceased to exist. But other nations, profiting by our experience, took up the medical war scheme where we left it, and have carried it to the perfection which characterizes army organization in Europe to-day. A marked advance toward this result followed the development of the German system, in which, commencing on the fighting line, the relation between the regimental medical aid (medical officers), the regimental sanitary detachments (soldiers of the line detailed and instructed as stretcher-bearers), the divisional bearer companies (hospital corps soldiers), the field, communication, and base hospitals, and hospital transports (boat or rail), is clearly defined. But it may be asked, Why this elaborate system? Experience has emphasized the fact, that "any military body, trusting for its medical efficiency to the battalion aid alone, must of necessity come to utter grief when the battalions have to move forward off the battle field, and the sick and wounded must look for attention to other hands than those of their regimental comrades." The combatant soldier's sole function is to fight, and the hospital corps soldier's to care for him when he falls.

It is needless to dwell upon the value of such an organization; twenty-five years ago some questioned it, to-day no one who has investigated the subject can doubt that a hospital corps is essential to a properly organized army. Such a corps cannot, however, be recruited and perfected in a week. There must be officers to teach before men can learn, and the object of this paper is to suggest to the profession, very crudely indeed, a convenient method by which a large number of medical men can profitably, and almost without effort, be taught many of the duties pertaining to the medical officer.

The uniformed militia of the various States furnish the foundation upon which the proposed organizations may be based, and the medical schools the material and means of instruction.

It requires two percentum of the fighting strength of an army to take care of the invalids. Upon this basis there might be organized in each State a hospital corps numbering two percentum of total uniformed militia. This corps should be divided into companies containing say three commissioned officers (medical), thirteen non-commissioned, one musician, and forty-eight privates. It should be uniformed and be an integral part of the national guard, subject to the same regulations, entitled to the same privileges, and raised by recruitment, as are all other soldiers of the guard. But, since the duties of the corps are special, and essentially in the line of medical education, the medical students might furnish the material and the medical schools the means of instruction, thereby adding largely to the scope and usefulness of both, and resulting in mutual benefit to students, school, and country. These companies should not, however, be wholly composed of medical students, but a certain proportion should be recruited from among men in other pursuits, who are anxious to familiarize themselves with "first help" methods, etc.

The proposed hospital corps of the National Guard should be uniformed, equipped, instructed, and drilled in like manner as the hospital corps of the regular army, in order to insure entire unanimity of action between organizations which must serve together in the event of hostilities. It should be officered by medical officers of the National Guard who would be responsible for its proper discipline and instruction, and the corps should always be under control of the medical department. Such an organization would correspond to the divisional (stretcher) bearer companies of the German system. It would not only furnish soldiers trained to meet the surgical emergencies of the battlefield, but also men skilled in the manifold duties pertaining to military hospitals, both field and permanent. In a word, it becomes responsible for the invalid from the moment he falls on the fighting line till restored to health, discharged for disability, or buried with military honors.

In addition to the hospital corps composed of soldiers, as already stated, whose sole function is the care of the invalid, there should be detailed four men from each company of the guard, to be known as company stretcher-bearers, who are to be instructed in "first help" methods, and whose duty will be to

assist in removing the wounded from the fighting line, when they are required to supplement the bearer companies. These soldiers belong to the line of the army, and can only be used for bearer purposes in an emergency.

In the United States Army they are detailed by the company commanders, with concurrence of the senior medical officer, are excused from no company duty, and are only under control of the medical officer when in the actual performance of bearer duty. They in no sense belong to the hospital corps, and correspond to the regimental sanitary detachment of the German system.

The course of instruction may be outlined as follows:

1. Infantry drill through the school of the company. It must ever be remembered that the men of the hospital corps are soldiers, identical with the soldier of the line in every respect except as to their special functions, and that their efficiency largely depends upon their discipline. Ordinary drill promotes discipline, as well as lays the foundation upon which are based the stretcher and ambulance tactics. This drill is conducted by medical officers in foreign armies, who are taught to be soldiers as well as surgeons. In our own, the enlisted man is required to serve a year in the line before transfer to the hospital corps.

2. First aid to wounded, embracing elementary anatomy and physiology. Treatment of fractures, dislocations, and sprains (including improvising of splints and dressings).

Arrest of bleeding.

Transport of injured.

Resuscitation of apparently drowned.

Nursing.

Names, use, and care of surgical instruments.

General principles of sanitation.

3. Stretcher drill, the lifting, carrying, and lowering of wounded.

Command of aid parties at accidents, or in the field.

Improvised methods of carrying injured.

Structure and loading of ambulance wagons, and the utilization of ordinary wagons for carrying wounded.

Loading and unloading of mule cacolets and litters.

Loading and unloading of ambulance railroad trains, and the manner of arranging cars for carrying wounded.

Battlefield aid, formation of dressing stations, field hospitals, etc.

Camp kitchens, and cooking.

The general duties of a hospital corps soldier in the field.

4. The proper method of organizing so-called permanent hospitals during active service, discipline, nursing, cooking, water supply, ventilation, washing, dispensing of medicines.

The care of public property, keeping of records, accounts, etc.

Rendering of returns and reports.

Army regulations and orders; particularly those pertaining to the medical department and hospital corps.

It can hardly be denied that great advantage would result to the country as well as to the individual, could there be a general dissemination among medical men of a practical knowledge of all these subjects, which make the army medical officer a specialist, in the broad meaning of that word.

It is quite true that many medical men may not be called upon to use it, but the probabilities are largely in favor of the opposite conclusion. Certainly should war come to us—and come it must—the profession of the country would be largely responsible for its medical results.

Must we then, again, begin "without hospital corps, without field hospitals, with an untrained medical staff, with no systematic base hospital organization?"[1]

FORT RENO, INDIAN TERRITORY, February, 1888.

MEDICAL PROGRESS.

Three Recent Interesting Cases of Brain Surgery.—At a meeting of the Surgical Section of the Royal Academy of Medicine on Friday last, three successful cases of trephining were reported, and the discussion upon the papers was adjourned to a future night. These cases were all remarkable. PROF. THORNLEY STOKER read particulars of a case in which a man fell from a cart while drunk. He came to the Richmond Hospital some days later, rather stupid, and with some lightly marked paralytic symptoms. It was not easy to determine whether he had not had an attack of apoplexy. The paralysis becoming more marked, Mr. Stoker trephined in the region of the fissure of Rolando—there was no fracture—and struck the margin of a blood clot. He again trephined and more fully exposed the clot, which was washed out. The area so compressed was about three inches, and the clot measured nearly an inch in depth. The patient recovered and was exhibited. Sir W. Stokes read a paper on a case of successful trephining for cerebral abscess, and exhibited his patient. The man had been struck with a poker on the left side of the mesial line of the head, and about an inch anterior to the coronal suture. He was treated as an out-patient at another hospital, but ultimately applied at the Richmond, when he was admitted, several weeks having elapsed from the date of the injury. He soon presented brain symptoms, became convulsed and comatose, and it was determined to trephine. A

[1] The substance of this paper was embraced in a report to the Adjutant-General of the State of New York, with view to the formation of a hospital corps in the National Guard of that State.

An order for the detail and instruction of company bearers has already been promulgated, and it is hoped that ultimately a distinct hospital corps will be organized on lines herein indicated.

small fracture was found under the scar; the dura mater bulging into the wound, an exploring needle was introduced to the depth of an inch and a half, and pus was at last found. The dura mater was then incised, and one ounce and a half of pus was evacuated. The patient completely recovered, and is now attending to his ordinary work. The paper noted eleven other cases of abscess which had been operated upon by various surgeons, and discussed the questions involved. The third case was brought forward by Dr. C. B. Ball, of Sir Patrick Dun's Hospital, and the patient was also produced. The lad had been struck with a small knife over the squamous portion of the left temporal bone ten days before admission. The wound was healed, but he had some aphasia. Pain in the head and ear supervened, and the aphasia increased. It was determined to explore. He was trephined some weeks after the original injury. A wound was found in the dura mater corresponding to the puncture of the bone. A sinus forceps was passed in, the wound opened up, and some blood clot escaped. The patient was decidedly better, but next morning he was again aphasic. The wound was washed out, and more blood clot escaped. The aphasia almost disappeared, but two days later it returned, and the wound was again washed. After this the patient progressed favorably, and is now well. Dr. Ball pointed out the *rôle* of the brain lesion, as indicated by the various symptoms of aphasia. The group of cases was a very remarkable one, and the record of them cannot fail to influence the views of surgeons on the subject of brain surgery.—*British Medical Journal*, March 3, 1888.

The Treatment of Diphtheria by Creasote.—LEGROUX, in the *Archives de Laryngologie* of February 15, 1888, reports the following methods of treating diphtheria by creasote:

By atomization—

Creasote (1 to 100)	1 quart.
Alcohol	2½ drachms.

Pencilling the throat every four or five hours with

Glycerine	℥ 5.
Alcohol	℥ 2½.
Creasote	♏ 15.

Hypodermatically, in very severe cases—

Sterilized olive oil	parts 9.
Creasote	part 1.

From 1 to 3 minims of creasote may be injected into the hypochondrium.

Sixty-eight patients were treated, of whom thirty recovered; among those tracheotomized, one in three recovered.

The Medical Treatment of Typhlitis.—BOUCHARD advises morphia to quiet pain, with belladonna plaster locally, and large poultices over the painful part. Hot water enemata twice daily of a quart of water, to which are added sodii borat. grs. 75, and two or three teaspoonfuls of the following mixture: Tinct. benzoin, alcohol, camphorat. equal parts. Absolute rest must be enjoined. Purgatives should be used with great caution, magnesia is suggested.

For diet milk and lime water, in small quantities, to which is added a little yolk of egg—in short, food leaving little residue and not favoring fermentation. If the affection becomes chronic small blisters are beneficial—*Revue de Thérapeutique*, February 15, 1888.

Fatal Injury from Fall on the Feet; "Water-hammer" Shock.—BENJAMIN WARD RICHARDSON reports, in the *Medical Press* of February 22, 1888, the following interesting case: The first illustration of the kind to which my attention was specially directed occurred whilst I was one of the physicians to the old Blenheim Street Dispensary, an institution now long since of the past. A glazier who was repairing a first-floor window near the dispensary, slipped and fell; he came down upon the pavement straight upon his feet, "like a cat," as one of the witnesses said at the inquest, then he dropped to the earth and was taken up dead.

I was seeing the out-patients at the time of the accident, and was called to the unfortunate man. He was lifeless when I arrived, and although his fall had not been more than fourteen or fifteen feet, at the most, he was said to have died instantly, without the slightest trace of bruise or fracture of bone. He was considered a healthy and very steady man, and, except that he was of rather small stature and light build, he was well-shaped and strong. On the following day I made the post-mortem examination of his body. There was no external sign of injury, and every internal organ, including the brain, was quite natural except one. The pericardium was filled with coagulated bright red blood, which had escaped into it from a small rupture in, or rather through, the aorta immediately above the aortic semilunar valves. There was no evidence of structural disease in the coats of the vessel, and the rupture itself was nearly round, with smooth edges. It was about the size of a lace-hole in a shoe, and would have admitted a good-sized crow-quill; it was just above the centre of one of the segments of the aortic valve.

The cause of the fatal rupture in this case was due, I have no doubt, to a simple physical concussion, the like of which is sometimes met with in common machinery. When, suddenly, we turn the tap of a cistern of water, at a time when the water is running down the tube, we hear a noise—a smart rap—which working-men call "the water-hammer." Occasionally, at the moment when this noise is heard, the pipe bursts just above the stopcock, owing to the sudden arrest of the flow and the resultant pressure. It is precisely the same in the aorta under the circumstances detailed in the case of the glazier. The whole of the blood of the body in its course out of the left ventricle—with the exception of the little quantity which goes to feed the coronary circuit—has to ascend through the first part of the aorta, and when the semilunar valves close up below it the artery undergoes great dilatation. Ordinarily, the resiliency of the arterial tube is sufficient to meet the pressure, but if at the moment of strain there comes a percussion that will bring the volume of blood back upon the valves the water- or, in this example, the blood-hammer-stroke comes down with effective force, and either distends the segments of the valves driving them downward toward the ventricle with considerable tension and strain, or the arterial coat is torn. As a rule, nothing more happens than distention of the vessel; as an exception, the vessel gives way and the pericardium is filled, rapidly, with blood.

The Dangers of Simple Extraction of Cataract.—DERBY, of Boston, in the *Boston Medical and Surgical Journal* of February 28, 1888, calls attention to the dangers of cataract operations, as follows:

The question as to what operation should be performed in an ordinary case of senile cataract is once more a prominent subject of discussion. At the late meeting at Heidelberg, as well as at the one held at New London, this matter engrossed much attention. More recently, Professor Schweigger, of Berlin, has published in Knapp's *Archives* an article on the return to the flap operation, in which the performance of iridectomy, the "needless maiming of the iris," as the author expresses it, is strongly denounced.[1]

The question at present under discussion is, therefore, the following: Do the modern discoveries of a reliable myotic, of an efficient local anæsthetic, and the adoption of antisepsis, justify a return to the principle of extracting senile cataract without the performance of iridectomy?

May not the operation, however, be restricted to certain cases, and are not certain special rules to govern the after-treatment? The writer has laid down the following principles for his own guidance:

1. He would reserve simple extraction for those cases in which the cataract is ripe, the nucleus large, the patient tranquil and amenable to discipline.

2. After the operation, the application of the bandage should be slightly delayed, the object being to ascertain whether the iris, once replaced, shows any tendency again to prolapse. If it does so, it is to be at once excised.

3. Eserine is to be applied directly to the eye immediately after the operation, and dropped in the inner corner of the eye, without separating the lids (as recommended by Schweigger) for the three following days.

4. Greater quiet on the part of the patient is to be insisted on than has been the case after the operation of Gräfe.

5. The eye needs to be inspected much sooner, certainly by the end of the third day.

And even if these or similar rules be followed, Derby cannot resist the belief that for the average surgeon, and in the present state of our knowledge, simple extraction at the best involves an element of danger that is wanting in the method of Gräfe. The successful extraction without iridectomy is uequestionably the more brilliant of the two methods, and the patient thus cured a more striking exemplification of surgical skill. A greater familiarity with the new operation may cause the risk to assume inconsiderable proportions. But some risk is likely always to remain. It is like the old question as to the relative advantages of ether and chloroform: the latter easier to transport, pleasanter to take, quicker in its effect, and occasionally alarming in its consequences.

The Treatment of Hydrophobia by Hyposulphites.—NEWTH describes his use of these remedies in septicæmia and kindred disorders as follows: I am in the habit of prescribing the hyposulphites in combination with bicarbonate of soda and sulphate of magnesia in peppermint-water. For children I simply give it with syrup and caraway-water. Though my experience is not sufficient to establish the value of this remedy decidedly, it is so far satisfactory that I unhesitatingly prescribe it in any cases where there seem to be symptoms of blood-poisoning. In aphthæ, for instance, it seems to work like a charm, and in boils, scrofulous abscesses, etc., it really appears to do great good. I have also prescribed it with success in diphtheria and puerperal fever. It seems to me that, as hydrophobia is without doubt a form of septicæmia, the hyposulphites might do good in this terrible disease. They certainly could do no harm, and, therefore, I would suggest a fair trial of this remedy, not only when the disease has developed itself, but as a prophylactic. After a bite by a mad dog I would give five or ten grains of the hyposulphite of sodium or magnesium (the latter is richer in sulphurous acid) for the first three or four days every four hours; then three times a day for a week; then twice a day for another week; then every morning early for one month; recommending a Turkish bath twice a week. When the disease has developed I would prescribe the hyposulphite every hour or every two hours, with vapor or dry hot-air baths, or prolonged warm-water baths containing some hyposulphite in solution. The hypodermatic injection might also be tried, especially if the patient is unable to swallow. In other cases the sulphurous gas might be given per rectum. By such means as these I firmly believe hydrophobia may be cured, and trust that those who have the opportunity to do so will try them.—*Lancet*, Feb. 18, 1888.

Convenient Combinations for Administering Hydrochloric Acid in Dyspepsia.—The *Revue Générale de Clinique et de Thérapeutique* of February 9, 1888, contains a number of formulæ for the administration of hydrochloric acid, from which we take the following:

Hydrochloric acid lemonade:

Aquæ	O1¾.
Syrup. simpl.	℥ 25.
Acid. hydrochlor.	♏30 to 60.
Spirit. limonis	♏ 15.

A half glass or glass after meals.

A digestive and laxative potion may be ordered as follows:

Acid. hydrochloric. . . .	♏ 15.
Syrup. simpl.	℥ 7½.
Vini rhei	℥ 25.

Of which the dose may be varied as indications demand.

Hydrochloric acid and cocaine may be given as follows:

Syrup. menth. piper. . . .	℥ 7¾.
Acid. hydrochloric. . . .	♏ 15.
Cocain. hydrochlorat. . . .	gr. 1½.

Which is prescribed by Huchard in varying doses for gastric pain in eating.

West prescribed for children the following mixture, in doses of one to two small teaspoonfuls:

Acid. hydrochloric. dil. . .	♏ 15.
Syrup. aurant. cortic. . . .	♏ 75.
Tinct. aurant. amari . . .	♏ 45.
Infusion. cascarillæ . . .	℥ 10.

Hydrochloric acid is given to increase the acidity of the gastric juice; to dissolve phosphates and alkalies; to contribute to the formation of chloride of sodium in the

[1] Archives of Ophthalmology, vol. xvi. p. 455.

organism. In general terms, it is given before meals to assist in overcoming gastric atony; after meals to remedy hyper-alkalescence.

The Influence of Various Foods on Respiratory Activity.—RICHER and HANRIOT conclude from their experiments that the taking of food, especially the hydro-carbons, greatly increases the gaseous interchanges of respiration. Nitrogenous and fatty foods affect respiratory changes very little. Food rich in substances forming gases absorb oxygen freely and produce carbon dioxide abundantly. Muscular activity or repose affects gaseous interchanges in no great degree.—*L'Union Médicale*, February 18, 1888.

Suicide with a Pin.—THOMSON reports in the *Medical Press* of February 22, 1888, the following extraordinary case:

The deceased was admitted to the Richmond Hospital, but was found to be dead. He had been arrested as a lunatic running about the street in his shirt. On examination of the body, the head of pin was discovered in the fifth intercostal space, two and a half inches from the nipple—downward and inward. The pin had traversed the pericardium, and wounded the anterior wall of the left ventricle. The pericardium contained seventeen and a half ounces of blood fluid, and there was a small rent in the wall a quarter of an inch in diameter, which was filled by blood clot. The surface of the ventricle in contact with the pin was torn to the extent of nearly an inch; a small vein was also wounded; all the internal organs were congested; the urine was albuminous.

Death from Sepsis after Perineorrhaphy by Tait's Method.—MUNDÉ, of New York, in commending Tait's operation and describing successful cases, reports a case of septicæmia, which occurred as follows:

Last December a patient presented herself at my office with a large complete laceration of the perineum. I admitted her into the Mount Sinai Hospital, and on December 28th did Tait's operation, under the most careful antiseptic precautions, irrigating the wound frequently with a 1 to 10,000 sublimate solution. Deep silkworm gut and superficial catgut sutures were used. The patient had a slight rise of temperature, and complained of much pain on the next day, but as there were no local evidences of inflammation I attributed the symptoms to nervousness (she was very hysterical) and reaction from the operation. I was then suddenly taken ill and confined to the house for three days. A messenger sent to the hospital brought me the news that the patient had a slight rise of temperature, but did not seem very ill. But as soon as I saw her, when able to go out, on the fifth day after the operation, I recognized septic infection, and at once removed the stitches. A large yawning, sloughing cavity presented itself, which was diligently and frequently irrigated, and the patient stimulated by all possible means; but she died of a low form of septic poisoning on the tenth day after the operation. Out of several hundred perineorrhaphies performed after the old method no such accident, indeed no febrile reaction had occurred to me. I do not see how I could have operated more aseptically; it is true, the stiches should have been removed sooner, and would have been had I been able to see the patient. But septic infection ought not to have occurred at all. I have heard of its taking place in the practice of other operators, but I had so far escaped, and I did not wish to destroy the success of the operation when septic infection was yet doubtful. Still, the fact remains that so deep a wound into so highly absorbent tissues may be more liable to septic influences than the more superficial wound of the old operations.

My confidence in Tait's method is, however, so strong that I propose to perform the operation next week; but I shall most carefully watch for a rise of temperature, and rather remove the sutures early than risk the life of my patient from septicæmia. I would add one caution, and that is, not to divide the recto-vaginal septum to a greater depth than half an inch, which gives a large enough surface for union.

Antiseptics for Use upon the Skin.—The *Revue Générale de Clinique et de Thérapeutique* of February 23, 1888, gives the following formulæ for antiseptics appropriate for use upon the integument:

A lotion—

Acid. thymic.	1 part.
Alcohol.	4 parts.
Aquæ destill. . . .	ad. 1000 parts.

Glycerole of boric acid—

Glycerole of starch . . .	10 parts.
Boric acid	1 part.

For chafing and perspiring feet:

Acid. salicyl.	3 parts.
Starch	20 parts.
Powdered chalk . . .	87 parts.

may be employed.

Cocaine in Urethral Operations.—DR. ALEXANDRO SETTIER gives in a Spanish medical journal his experience of the employment of cocaine as a local anæsthetic in operations of various kinds on the urinary organs. He has used it in nine cases of internal urethrotomy, one divulsion (forcible dilatation), two urethro-perineal fistulæ operations, one rapid lithotrity, three circumcisions for complete phimosis, and two extirpations of vegetations. In none of these eighteen cases has he observed any serious toxic symptoms such as have been described by Peck, Reich, Bellyarminoff, and Keyser. In three cases, however, the patients complained of severe headache and great dryness of the mouth. The solutions used were generally of the strength of 5 or 6 per cent. For internal urethrotomy a variable quantity (in one case as much as five drachms) of the solution was introduced into the urethra, as near as possible to the seat of the stricture, by means of a catheter in the form of a simple tube open at both ends. This solution was allowed to remain in contact with the tissues for twenty-five minutes before the operation was commenced. In all cases of this description the cocaine succeeded admirably, the patient feeling no pain at all except at the moment when the stricture was divided, and then only in a very slight degree. The action of the drug was much less satisfactory in the single case of forcible dilatation, but the pain lasted a much shorter time than it does in similar cases where no anæsthetic is employed. No effect was produced in the cases of urethro-perineal fistulæ. In the lithotrities, circumcisions, and the opera-

tions on preputial vegetations very good results were obtained. In the two latter classes of cases the cocaine was combined with glycerine or vaseline in the proportion of 1 to 15; this was applied over the surface of the prepuce. In one of the phimosis cases an 8 per cent. solution was likewise injected under the prepuce. This, however, caused a good deal of headache. Dr. Settier remarks on the importance of keeping the solution a long time in contact with the mucous membrane of the bladder in cases of lithotrity, in order to prevent contractions of the organ taking place during the process of aspiration.—*Lancet*, February 25, 1888.

Punctiform Parenchymatous Hemorrhage in Railway Injuries.—VIBERT, in a recent medico legal study of railway injuries, reports an interesting observation in an accident on a French railway. Among eighteen persons killed were five whose bodies presented no fracture, wounds, dislocations or external lesions. Post-mortem examination revealed appearances in the tissues resembling the phenomena of asphyxia, and in particular very numerous punctiform hemorrhages in the viscera and tissues of a portion or the whole of a segment of the body. This phenomenon was also present in cranial fractures. Vibert considers it due to lesions of the nervous centres, probably the medulla.—*Gazette Médicale de Paris*, February 18, 1888.

The Mode of Action of Corrosive Sublimate in Poisoning.—In exhibiting before the Berlin Medical Society specimens from cases of poisoning by corrosive sublimate, VIRCHOW explained its effects as follows: He had raised the question, How it happens that in one case of sublimate poisoning deposition of lime takes place in the kidneys, and in another not? This depends on the mode of poisoning. When an animal is poisoned with sublimate, a distinction may be drawn between two factors: 1. The animal receives an injury from the sublimate as such, which may be compared with any other metal, such as gold, iron, etc.; and, 2, by the sublimate the tissue change is altered, the quality of the blood undergoes a change, its alkalescence is diminished by lactic acid, which at once appears in it. Lactic acid is a great enemy of the bones, prevents their formation and dissolves them. Sublimate forms lactate of lime, and this is excreted through the kidneys. This excretion takes place through sound kidneys; by the introduction of the poison, however, they become diseased, and as the excretion cannot be effected under these circumstances, the lime salts remain (retained in the kidneys), and the patients die, not because they have lime in the kidneys, but they have died, and had lime in the kidneys. In these cases the question is one of the amount of lactic acid, and the condition of the kidneys.—*Medical Press*, February 22, 1888.

Antipyrin and Cocaine, for Dental Anæsthesia.—MARTIN has obtained good results by injecting this solution into the gum about a painful tooth:

Cocaine hydrochlorat.	⅜ gr.
Antipyrin.	6 grs.
Aquæ destill.	30 ♏.

The effect is obtained more slowly than when cocaine is used alone, but continues longer, and the risks of cocaine are avoided.—*Revue Gén. de Clin. et de Thér.*, February 23, 1888.

Forced Respiration in Profound Narcosis.—FELL, of Buffalo, reports a case of profound narcosis from which the patient was rescued after thirty hours of constant labor. Artificial respiration failing, tracheotomy was performed, and forced respiration by a bellows-apparatus devised by Dr. Fell was performed. Life was saved, in the opinion of the reporter, by this means. This is the third case so treated by Dr. Fell, with successful results. —*Buffalo Medical and Surgical Journal*, March, 1888.

The Use of Mercury in the Early Stages of Syphilis.—JONATHAN HUTCHINSON writes as follows in a paper on this subject in the *British Medical Journal* of February 25, 1888: My wish has been to draw attention to a clinical fact which, although hitherto much ignored, or even denied, must have been for a long time more or less under the cognizance of all engaged in the treatment of syphilis according to modern rules. The fact to which I refer is that the early use of mercury does not only greatly shorten the duration of the primary phenomena, but that it also much modifies, and in many instances entirely prevents, those of the secondary one. I have, indeed, ventured to assert that, when circumstances favor the febrile stage of the exanthem, syphilis may be rendered wholly abortive. If we can accept this proposition, I feel sure that we shall have gained a step in the orderliness of our future work.

Ergot of Oats.—BOUSQUET has observed, in the province of Oran, the effects of this substance as used by the Arabs. It is commonly employed by native accoucheurs and Arab women for the purposes for which we employ ergot of corn or rye.

Bousquet employed it in nine cases, in the form of powder, for uterine atony and hemorrhage. Its specific effects were as pronounced as those of corn ergot, and in addition it exerted a general tonic effect which was most salutary.—*L'Union Médicale*, February 19, 1888.

Poisoning by Antipyrin.—JENNINGS reports, in the *Lancet* of February 25, 1888, the following instructive case:

Miss X., sixty-seven years of age, consulted me for rheumatoid arthritis, affecting chiefly the hands. Her maternal grandfather was gouty, and she has always suffered more or less from arthritic symptoms in the knee-joints. The heart is peculiar in that it normally beats only about thirty-five pulsations to the minute. This lady has recently complained of swelling of the hands, without positive pain, but with sensations of pricking, which interfered with her usual occupation, that of preparing and classifying specimens relating to natural history. (It may be mentioned that she is a distinguished conchologist, well known in scientific circles.) I recommended her to take antipyrin, which seemed to be the more indicated as she had already been relieved on a former occasion of rheumatic troubles by salicylate of soda, which had, however, left her greatly weakened. The treatment was commenced on January 23d, and for eight days she took thirty-seven and a half grains of antipyrin daily, when on the 31st she was surprised to see that she was covered with erythematous patches on the arms, and at the same time felt that her eyes were uncomfortable.

The following night she scarcely slept at all; the feet were icy cold; no nausea; no giddiness. The next morning she discovered that her face was red and extraordinarily swollen. The eyelids were almost closed by the swelling, and left only a narrow slit for vision. Pushing her investigations further, she saw that the rash was general and of the color of pomegranate, arranged in patches the size of a threepenny piece, separated one from another by intervals scarcely noticeable at first sight, but distinctly recognizable upon closer examination, and about a millimetre in diameter. The patient had no appetite, and did not attempt to eat; she only took a small quantity of tea during the day, which she passed sitting by the fire. Curiously enough, this condition gave rise to no suffering; all that was felt was a strange sensation "as if the inside of the body was filled with ice." There was but little itching. The following day the condition was as follows: The eyes, which first attracted my attention, were the seat of slight catarrhal conjunctivitis—already, however, on the decline. There was irritation of the nasal fossæ, and hoarseness of the voice. Indeed, one might have thought of intoxication by iodide. The puffiness and swelling of the face had partly subsided, but the rash remained on the trunk and extremities. The pulse was twice as fast as usual, 76 to the minute; but notwithstanding this, for the patient, almost febrile acceleration, the temperature was lowered, the surface remaining cold. Beyond a slight buzzing in the ears, there was no other sensorial disturbance. As treatment, I merely prescribed small doses of tincture of belladonna. Next day the pulse was 56. The catarrhal condition of the oculo-nasal membrane was decreasing. Since then it has disappeared, and the eruption is gradually passing away. Bui the patient still suffers from considerable prostration and intermittent sensations of cold.

The Treatment of Whooping-cough.—SIMPSON found the following prescription most successful in treating 240 cases of whooping-cough among coolie children; mortality from the disease, nil:

℞.—Acid. carbolic.	♏j to ij.
Vin. ipecac.	♏iij to v.
Acaciæ gumm.	grs. v to x.
Syr. simplicis	ʒss to ʒj.
Aq. camph.	ad. ʒj to ʒij.

Every three hours.

—*Provincial Medical Journal*, March 1, 1888.

Cocaine Poisoning.—DÉJERINE is quoted by the *London Recorder* of February 20, 1888, in his description of the following interesting case: The patient was a dentist, twenty-six years of age. M. Déjerine found him in a semi-comatose state, with generalized muscular contraction of the arms and legs. The arms were slightly bent, the legs were stretched out. Patellar reflex action was not discernible, owing to contraction. The pulse was quick, but regular (120); the breathing hurried. The eyes were closed, the pupils dilated and insensible to light. There was complete unconsciousness. The following lesions were detected on the skin: There was a pustular crusty eruption, consisting of pustules the size of a pea, covered with a blackish-gray, dry scab on the anterior external surface of the two arms, and on the anterior part of the legs and thighs. This eruption resembled the scabs of syphilitic rupia. The patient had suffered from blennorrhagia. On returning to consciousness the patient walked about with closed eyes, on account of the painful sensation caused by light on the eyeballs. He gave the following particulars concerning the cause of the attack: Six weeks previously he began to administer subcutaneous injections of cocaine to himself. He began with doses of one-sixth of a grain. He increased the quantity gradually until he employed seven and a half grains. The injection produced agreeable sensations and sexual desires, followed by ejaculation. The evening on which the attack above described took place he had injected fifteen grains of cocaine at ten o'clock. He employed three syringes and a warm solution. At the third injection he fell down in an unconscious condition. On the following day Dr. Déjerine again examined the eruption, which consisted of limited gangrenous areas of the epidermis, resulting from the injections with cocaine, which the patient had introduced into and not under the skin. At the spot where the injections were made white cadaverous spots were apparent; these were insensible to the touch. The patient stated that when M. Déjerine pinched him in different places during the state of coma he was aware of the fact, but that he felt no pain whatever. He was, therefore, sensible to the contact of an external object, but insensible to pain. The patient recovered. He has ceased to employ cocaine. M. Déjerine considers that if the patient had not gradually accustomed himself to progressive doses of cocaine, the dose of fifteen grains would have proved fatal.

Injection of Ergotin into the Tissues of the Cervix Uteri.—SCHUCKING reports, in the *Centralblatt für Gynäkologie*, No. 8, 1888, his method of injecting ergotin into the cervix as follows:

He uses a carefully disinfected needle; the solution of ergotin is freshly made and undiluted, and the quantity is one-fourth to one-third the contents of an ordinary hypodermatic syringe. The needle should not be inserted deeper than a fifth or a fourth of an inch into the anterior or posterior lip of the cervix. He has never seen ill effects, in pain or any injury, follow. He does not favor injections made into the body of the uterus, or into a tumor of the uterus; ill effects reported from such injections he considers due to failure to disinfect properly the needle used.

The Anti-tubercular Action of Iodoform. — ANDRASSY, BRUNS, and NAUWERK are quoted by the *Centralblatt für die med. Wissenschaften*, No. 8, 1888, in reporting their results with the use of iodoform in tuberculous disease, generally in tuberculous abscesses, by drainage and injection of iodoform in emulsions with glycerine. Andrassy treated twenty-two abscesses with ten per cent. iodoform emulsion of equal parts glycerine and water. The injections averaged two or three for each case, repeated in about two weeks, two and a half drachms of iodoform being used at each injection. Twenty of the abscesses treated were permanently cured.

Bruns and Nauwerk cured forty tuberculous abscesses out of fifty-four which were treated. In eight cases portions of the pyogenic membrane were excised and examined for bacilli; these examinations showed a non-irritant, but anti-tuberculous action of the iodoform.

THE MEDICAL NEWS.

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SATURDAY, MARCH 24, 1888.

EXSECTION OF EXTRAUTERINE PREGNANT CYSTS.

ALTHOUGH there are forms of extrauterine pregnancy in which the Fallopian tube is not a factor, as is clearly demonstrated by the remote location and attachment of the placenta in well-authenticated cases, the great majority of ectopic cysts will be found to be, or to have originally been, tubal. There is nothing in the inherent vital power of a human ovum, to make an original abdominal development of it impossible; the only thing strange about it is, that this so rarely happens.

An ovum has, prior to its attachment to some vascular base, an independent life, like that which exists in a seed, a bud, and a bird's egg. This life continues long enough for the ovum to travel from the ovary into the uterine cavity, and there form an attachment, by which its independent power of living is no longer required; and it consequently ceases. Is there any reason why this independent living and moving body cannot do in the abdominal cavity what it does in the uterus and Fallopian tube? Heat starts the process of incubation in a bird's egg; take away this stimulus long enough, and its reapplication only produces decomposition; the inherent life is destroyed by the interruption in the development of the bird. Reasoning analogically, a human ovum once attached to the lining of the Fallopian tube, has lost its independent life, and can no longer live, if *entirely* separated and cast out, by the bursting of the said tube; to continue its development below the tube, or within the abdominal cavity, its vascular dependence must not be interrupted; its blood supply is now essential to life. If, then, we find a placenta attached to the abdominal wall on a level with the umbilicus, as in the celebrated Weist operation, of Richmond, Indiana, 1884, we have a right to infer that this placenta did not commence to develop in the Fallopian tube, and was thence transferred to the abdominal wall. The same may be said of other cases that are historical, where the placenta was found at still more remote and singular locations, high up in the abdominal cavity. There are those who would have us believe that all abdominal pregnancies were originally tubal; but this is much more difficult to credit than that some are *ovarian* and others truly *abdominal*, as the great majority believe.

The large majority of cases being Fallopian, and in their early stage of growth capable of exsection without very great difficulty or danger, it becomes a question whether this should not be done to secure the woman against the risk of death from the laceration of the cyst and resulting hemorrhage, an accident which is most common, according to Parry, from six weeks to three months after conception, the height of danger being at eight weeks. More recent observers place this point at ten weeks. In considering this question of the propriety of exsection, as advocated by Martin, of Berlin, and others, we must carefully take up two points of vital moment, viz.: 1. Can the presence of an ectopic fœtal cyst be detected prior to laceration? 2. Shall fœticidal measures be adopted; or the operation of exsection in preference?

We must admit that a differential diagnosis is not absolutely positive; but there have been such diagnoses made, and exsections performed successfully, as we can bear witness to. Mr. Tait denies that a diagnosis can be made prior to rupture, which may be correct so far as his personal observation has extended; but American gynecologists, who have taken time to examine cases historically, as well as by touch, make much more positive claims. A thin hand with long fingers and a delicate tactile sense, are essentials to perfection in examining the pelvic organs. There is certainly a great difference in operators as to their delicacy of touch with a probe, sound, or the finger, and what may be quite possible with one, is impossible with another. Quite recently we heard a surgeon charged with untruthfulness, because he claimed a power in differential

diagnosis by the touch, which he honestly believes, from repeated tests.

Granted that the diagnosis is correct, should the life of the fœtus be destroyed by galvanism, and it be possibly a cause for future trouble, as has several times happened; or should the cyst and its contents be exsected, so that there shall be no foreign body left, as a centre of inflammatory mischief? Recent discussions by leading gynecologists, show that there is a decided opinion held by many, that exsection is to be preferred, in many cases, and particularly where the fœtus is of a size to give trouble. Martin advocates this operation at all ages of the fœtus, and has removed with success to the mother, a moribund child, with much of the cyst and placenta, at seven months.

It should be remembered that it is only in exceptional cases of advanced ectopic pregnancy that *entire* exsection of the sac and contents can be accomplished. This was done in October last, by Breisky, of Vienna, in a case of intra-ligamentous gestation at full period, and both mother and child lived. But in thirty cases of primary laparotomy, for the saving of child and mother, the placenta was cut into in the line of abdominal incision five times. In such subjects the placenta cannot be removed, unless, as in the Breisky case, where it had no attachment to the abdominal wall. In a few instances the sac has been exsected after fœtal death in the latter months of gestation; but here, again, the location of the placenta among the intestines and elsewhere, has rendered its removal impossible, in the great majority of cases. The Martin method will have to be confined almost exclusively to tubal cases, and to these chiefly, in the early months, where its application may become one of much value. Martin is said to have operated upon twenty cases, with excellent result.

SEWAGE IN WATER-SUPPLIES.

ONE of the most notable papers read at the Sanitary Convention held in Philadelphia, in May, 1886, under the auspices of the State Board of Health, gave a clear exposition of the specific dangers to the public health attending the use of unwholesome water-supplies. The point of greatest interest brought up for discussion was the connection between sewage in water-supplies and the prevalence of typhoid fever.

The influence of a sewage infected with the typhoid cause is, of course, well demonstrated by many and constantly recurring investigations into the origin of local epidemics; but in the paper in question the position was taken, by its author, DR. SMART, of the Army, that on account of the prevalence of typhoid fever in our rural, as well as urban districts, all sewage entering a river or lake must be regarded as an infected sewage and capable at some time, if not at all times, of spreading the disease by the use of the water from these infected sources. The continued prevalence of typhoid fever in our communities was referred, among other causes, to the use of water which contained sewage; and the medical history of several cities, as Philadelphia, New York, Brooklyn, Boston, Baltimore, and New Orleans, was brought forward to show that the typhoid death-rate is proportioned to the carelessness of a community in regard to its water-supply. It was demonstrated that as surely as a water free from sewage is introduced into a city, in place of that from foul streams or wells in contaminated soils, so surely does the typhoid-rate fall in a manner which leaves but one interpretation, for lest this fall should be attributed to the sewerage system which usually follows the systematic distribution of water, the history of Baltimore, which built no sewers, shows no exception to the general rule. The only way to reduce the typhoid-rate, from 30, 40, 50, or 100, annually per 10,000 living, to the small figure which would represent the action of other and as yet unsettled causes, was held to be by obtaining a water-source untainted by sewage and carefully preserving it from subsequent pollution. As this conclusion ran counter to the interests of the capital already invested by many municipalities in perfecting their water-supplies, the points of the argument supporting it were not utilized in a sanitary campaign against sewage. Indeed, health officers were afraid to open up the question of sewage-inflow into their streams lest their necessary antagonism to this invested capital should react to the detriment of other suggested sanitary improvements which required assistance for their accomplishment.

And now there comes from the other side of the Atlantic the testimony of Vienna in support of that given by our American experience. The *Revue d'Hygiène* of January 20, 1888, in a paper by M. MOSNY, brings up the water-supply of that city for comparison with the ravages of typhoid fever. From 1851 to 1874, while well-water of an impure character and river-water from the Danube were used, the deaths from typhoid fever ranged from about

100 to 340 annually out of every 10,000 living; but the introduction of a spring-water supply in 1874 was immediately followed by a fall in the rates to 50; and the gradual disuse of the former sources has brought the rate for the past three years down to about 11. As the sewerage system was in existence during the period of high rates, the fall since 1874 is necessarily referred to the use of a water which is free from sewage; and this view is strengthened by the occurrence of an epidemic in 1877, which, it is claimed, was caused by a return to the water of the Danube on account of the spring supply failing by the freezing of certain of its sources. The sections of the city affected by the epidemic were those in which the river-water had to be largely used. These facts so impress M. Monsy that he announces water to be the principal agent in the transmission of typhoid fever, and claims that the only thing needful to uproot the disease from a city in which it is endemic, is to distribute a pure water to its inhabitants.

The city that has effected this desirable change comes forward with its experience; but it is too much to expect that others will profit by it so long as the expenditures involved in such a change are not called for by a death-rate beyond that which, preventible though it be, we bear by habit without complaint.

THE malady to which the late Emperor of Germany succumbed, according to the *British Medical Journal*, was renal colic, to which he had been subject for several years past.

BELLEVUE Hospital Medical College, at its annual commencement last week, conferred the degree of M.D. on 144 graduates; the Woman's Hospital Medical College, of Philadelphia, on 27; the University of Buffalo on 44; the University of Nashville on 82; Memphis Hospital Medical College on 54; Miami Medical College of Cincinnati on 21; Southern Medical College of Atlanta, Ga., on 32.

AT the annual meeting of the Medical Society of London, held March 3d, it was announced that the Fothergillian prize of a gold medal of the value of twenty guineas, had been awarded to Dr. Hobart A. Hare, of Philadelphia, for his essay on "The Pathology, Clinical History, and Diagnosis of Affections of the Mediastinum other than those of the Heart and Aorta."

WE learn, with great regret, that Sir Henry Acland has recently undergone the operation of removal of the left eyeball on account of hemorrhagic glaucoma. We trust that this will not preclude his visit to this country this summer, which, we are informed, he had in contemplation.

IN our "News Items," last week, we quoted from the *Lancet* the statement that representatives of M. Pasteur had sailed for New South Wales to enter into competition for the prize of £25,000 offered for the depletion of the plethora of rabbits in that country. Almost simultaneously there comes from the antipodes the announcement that the adoption of M. Pasteur's remedy will be resolutely opposed in some parts of the colony. A government official, by the name of Abigail, has declared his antagonism to the introduction of the chicken-cholera microbe, as being more fraught with danger than the pest of the rabbits. It is possible that the French envoys may have taken their long voyage in vain.

Science has addressed inquiries to twenty-eight medical schools in the United States, asking their attitude regarding the germ theory of disease, and what, if any, facilities for teaching bacteriology each affords. The replies indicate that in but one instance was a positive denial avowed. All teach the germ theory, and demonstrate bacteria to a greater or less extent.

SENGER reported at a recent meeting of the Berlin Medical Society that he had examined ten carcinomata by bacteriological methods, without finding a bacillus which he considered in any way a cause of the carcinoma. It is stated that KOCH agrees with him in considering Scheurlen's cancer bacillus as a harmless bacillus, growing in the potato-culture material.

DR. E. H. BARTLEY, formerly chief chemist to the Brooklyn Board of Health, has reported to the Secretary of the State Board upon the adulterations of spices practised in the spice mills of that city. Among the articles used to mix with pepper, mustard, and ginger, he found burnt nut-shells, charcoal, corn meal, and wheat middlings. This report has proved to be of the nature of a bomb-shell in the camp, as almost nothing is being done in New York State for the sanitation of the food supply.

The Canada Health Journal has become *The Prophylactic*, and has moved its office of publication

from Toronto to New York City. This journal is ably edited and wears the aspect of growing prosperity.

Medical Science, a recently established medical journal published in Toronto, has been received. It will appear monthly; its first number contains several articles by well-known Canadian physicians, and an address by Prof. Vaughan, of the Michigan University.

DR. EDWIN N. CHAPMAN died in Brooklyn, N. Y., March 2d, in his seventieth year. He was born at Ridgefield, Conn., in 1819. He was graduated from Yale in 1842 and from Jefferson Medical College in 1845. He was formerly the Professor of Materia Medica in the Long Island College Hospital, and the author of many pamphlets, and one book, a treatise on "Hysterology" (1872). He was a frequent contributor to the medical journals and to the proceedings of societies. One of his papers, in 1863, on the almost specific power of alcohol over diphtheria, attracted wide attention and a considerable following. His views were reiterated in 1877, when he claimed to have treated eighty-five successive cases of that disease, by alcohol with quinine, with not a death. He was a character of great originality, geniality, and enthusiasm; his quaint sayings were the current coin of the local profession about a generation ago. His death was by paralysis, following an apoplexy that disabled him about two years ago.

REVIEWS.

A MANUAL OF PHYSIOLOGY FOR STUDENTS OF MEDICINE. By GERALD F. YEO, M.D., F.R.C.S. Third American from the Second English Edition. Philadelphia: P. Blakiston, Son & Co., 1888.

THE appearance of another American edition of this well known and useful book is an evidence that it is one of those books which not only receive popular favor by reason of the first impression they produce, but also possess that which many works of its class lack, namely, a clear manner of making a statement and at the same time the advantage of doing this in a concise form. While, owing to its size, general discussions are of necessity left out, the author favors those views most commonly accepted so pointedly, that the student does not find himself at the end of a chapter with a confused jumble of theories, but one dominant idea to which he can cling with some feeling of security. Those of our readers who have used Yeo's book know of its value so well that anything we may say is unnecessary, and we think to the busy practitioner, who wishes to refer to a doubtful point, or to the student who wishes but one fairly positive statement of a fact this manual will prove well worth its cost.

SOCIETY PROCEEDINGS.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

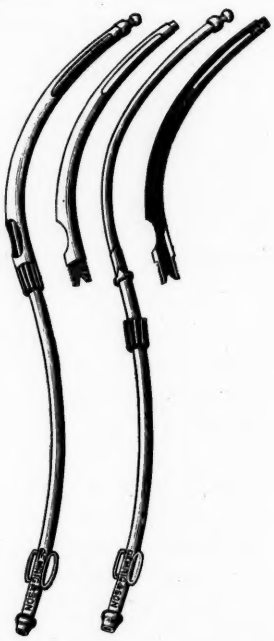
Stated Meeting, March 1, 1888.

THE PRESIDENT, THOMAS M. DRYSDALE, M.D., IN THE CHAIR.

DR. H. A. KELLY exhibited

AN ASEPTIC TWO-WAY CATHETER.

A two-way catheter, which will conduct and discharge water and solutions with the utmost freedom, and at the same time allow of perfect and ready cleansing after use, is a great desideratum. In the light of the antiseptic surgery of to-day, the use of such two-way catheters, as were commonly found in the surgeon's bag a few years ago, is in the highest degree dangerous, owing to the necessarily painfully tedious process of cleansing, and the impossibility of ever being able to assure ourselves that they are clean.



The catheter, as constructed by Dr. Kelly, consists of three parts. First the delivery tube, which conducts the stream from the hose connected with the reservoir into the uterus. This tube is well curved, and at its entrance is furnished with a knob to hold the hose better. Its extremity ends in a button, with a series of holes around and a little below the outer margin in the form of a rose, so placed that the stream is thrown out on all sides, and directed a little backward. The remaining two pieces are the two lateral halves of the *exit* pipe, which are attached very simply by entering at each end in the shallow collar under this *rose*, bringing them together around the inlet pipe and screwing the nut down on the thread on their upper end.

Each side has a fenestra in it, near the point, and is scooped out near its upper end, so that when the two are fitted together, there is a good-sized hole there.

When in use water flies with force from the holes at the end, washes with it débris and fluids, which enter at once the large fenestra on the sides, are washed down and out of this large hole into the receptacle. When out of use the cap is unscrewed, the halves fall apart, and every part which has come in contact with infection is at once exposed and readily cleaned.

The interior ought to be as highly polished as the exterior. Mr. Gemrig, of this city, has made these instruments for Dr. Kelly in a very satisfactory manner.

DR. KELLY also exhibited a

COTTON PACKER.

DR. B. C. HIRST showed

A PARIETAL BONE PRESENTING A SPOON-SHAPED DEPRESSION,

taken from an infant that died about two days after birth. The labor had been a difficult one, terminated by the forceps; the child had presented by the vertex in R. O. P. position; the pelvis was slightly flattened; head large, O. F. circumference 36½ centimetres. At the corresponding point internally there was a deep broad depression of the brain substance. The child apparently died from congestion of, and serous effusion into, the brain.

DR. WILLIAM GOODELL remarked that Ambroise Paré had compared these depressions to the indentations on kettle-drums. The indentation in this case was very typical. After turning in the flat and narrow pelvis, these indentations were very marked. They occupied then the temporal region and not the parietal; the shorter bi-temporal diameter being the one implicated. Hence, in turning, two mechanical advantages result, the small end of the cephalic wedge offers at the conjugate and also a cephalic diameter shorter than the biparietal.

DR. JOHN C. DACOSTA wished to know if Dr. Goodell thought turning could always be done in these cases. He spoke of a case which had occurred in his practice where the bone was much more depressed than in the specimen shown. The whole left side of the head was bulged in by a large fibroid of the uterus which fitted into the depression like a mortise and tenon joint. The pelvis was of good shape and roomy, os uteri wide open and soft, and yet the head, which was at or above the superior strait, in L. O. A. position, would not descend on account of the tumor. As the woman was in good condition, and nothing seemed to be going wrong, he let her alone for a time. After a little while, by the aid of some manipulation, the head began to unlock from the tumor, and rotated from O. A. to O. P. position, and the child was delivered alive. This case could not have been turned, as the membranes had ruptured and the uterus gripped the child's body itself, and even if it could have been, there would probably have been a dead baby from pressure on the cord during the long delay that would ensue in delivering the head, as the tumor would most likely have locked under the baby's chin. The forceps could not be put on, on account of obstruction to the left side by the tumor.

DR. GOODELL thought that Dr. DaCosta would have had less trouble if he could have turned the child. He did not think the neck would have been caught. He had been speaking before of the mechanical advantages only, and not of the difficulties in the performance of version.

DR. GOODELL presented

A SPECIMEN OF HYDRO-SALPINX.

It was the largest specimen he had ever seen; although he had met with much larger specimens of pyo-salpinx. The case had been treated by many gynecologists, and the true condition had not been recognized. There had followed the operation a complete relief from pelvic pains, but menstruation had continued up to the present time. The periods were, however, becoming less frequent. Since it is contended by some eminent surgeons, that when menstruation continues after the removal of the uterine appendages, some of the ovarian stroma must have been left behind, he wished to call the attention of the Society to the complete extirpation in this case of both ovaries and tubes. Although the former were more or less adherent, it was evident from the specimen that not a particle of ovarian stroma was left behind.

DR. M. PRICE said he had seen two cases in his practice where the menstrual discharge did not cease after the removal of the appendages. In one case it lasted for a year and a half, in the other six months. He had no doubt that Dr. Goodell's case would show the same result. There was but little doubt in the mind of most operators that the removal had not been complete.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, March 15, 1888.

THE PRESIDENT, A. JACOBI, M.D., IN THE CHAIR.

DR. FREDERICK R. STURGIS read a paper on

SOME QUESTIONS IN CONNECTION WITH SYPHILIS HEREDITARIA TARDA.

He remarked that the subject is one of much interest, not only to the syphilographer, but also to the general practitioner, especially on account of its relations to the etiology of many cases met with. In certain instances the agency of syphilis is suspected, without the physician's being able to prove the actual presence of this disease. It is only very recently that the phenomena of late hereditary syphilis have been at all appreciated by the profession. During the last twenty years much has been accomplished in clearing up the matter, but notwithstanding all the advances that have been made in this direction, many points still remain unelucidated. The question is still asked, Can hereditary syphilis remain latent for years? Until recently this was supposed to be a fact in certain exceptional cases of acquired syphilis; but the weight of evidence now shows beyond question that such a thing never occurs. Vidocq was the first to point out this mistake, and it is the generally accepted opinion at the present day in cases apparently of this kind that other and minor manifestations of syphilis always precede the so-called tertiary symptoms. There is always an initial lesion, although no trace of it may afterward be found.

It was at one time supposed that in all cases of hereditary syphilis the disease shows itself at birth, but the fact is now recognized that many cases occur in which

the children are apparently perfectly healthy when born. Statistics show, however, that in a large proportion of cases syphilitic lesions make their appearance before the end of the third month. Of 249 cases collected by Diday and other authorities, the disease showed itself in 118 by the end of the first month, in 117 between this time and the end of the third month, and in 14 later than the third month. Of Diday's own cases, in two the lesions did not appear until after the first year. In instances in which the disease first shows itself at a very late period, the question of acquired syphilis must always be taken into consideration.

The usual history of inherited syphilis, exclusive of those cases in which the child is born with marked lesions, is that after a few weeks or months the earlier manifestations of the disease make their appearance, such as a macular eruption or mucous patches of the mouth and tongue. At this early stage there is usually no eye or ear disease, or affection of the bones or joints. These lesions soon pass away, and there may be no further syphilitic trouble for years, or until the age of puberty is reached; when there may develop keratitis, otitis, disease of the bones or joints, or deep ulcerations in the buccal or nasal cavities. Unless the early history of the patient can be accurately learned, it may be supposed that these late manifestations constitute the first appearance of the disease. Thus, Fournier relates a case in which a man of thirty, who strongly denied ever having had syphilis, became affected with gummous ulcerations of the penis. By communicating with the patient's family physician, however, he ascertained the fact that his mother when *enceinte* with him had acquired syphilis from her husband; that at the age of two years he had had syphilitic disease of the knee-joint and peripheric ulcerations, and that when an infant he had infected with syphilis the nurse who suckled him. At the age of fourteen he had keratitis. The missing links in the history were thus furnished by the family physician. While even the diagnostic sign of the Hutchinson teeth is often absent in such cases, Dr. Sturgis expressed the opinion that in every instance of hereditary syphilis, if the history can be fully ascertained, it will be found that these later lesions have always been preceded by earlier and lighter manifestations of the disease.

DR. E. L. KEYES said that he could state with positiveness that it had not been his experience to see any instances of what could be called late hereditary syphilis. He had met with alleged cases of this character, but in all of them he was able to detect some scar or deformity which convinced him that the lesions referred to were not the first manifestations of syphilis in the system. He had followed up a number of individuals who were known to have had hereditary syphilis, and found that after various periods of latency the disease sometimes broke out again before the age of twenty-one. Before they reached the age of twenty-five, however, when crystallization of the system had taken place, the trouble had been pretty well gotten through with; and he did not recall a single instance in which a new symptom of hereditary syphilis had appeared after this latter age. Still, it is quite possible for us to believe almost anything in regard to syphilis, because it is such an irregular and erratic affection.

The character of the disease in any particular case is also largely a matter of soil; so that he did not believe in a virulent or a benign type of syphilis *per se*. The seriousness of the symptoms would depend to a great extent on the constitutional characteristics of the subject, and in this connection he referred to three brothers, all of whom had syphilis at different times, and in all of whom it produced grave lesions of the central nervous system, which, in one of them, proved fatal. Yet the third of the brothers gave the disease to a young woman, who had it in an extremely light form. The younger the subject, as a rule, he believed, the more serious the disease is apt to be, whether it is hereditary or acquired, on account of the more active changes taking place in the system during early life. Hence, the older the subject, the less serious its effects; and in the aged these are comparatively trifling.

Dr. Keyes then related the case of an infant born under his observation, in which the disease was so markedly developed that he despaired of its life. It shed its nails and had pemphigus of the soles and palms, bad snuffles, and enlarged epiphyseal extremities. He commenced treating it, however, with one-fiftieth of a grain of bichloride of mercury every two hours, night and day, and it soon began improving. At the age of six months now, it was not only alive but thriving vigorously, and it still continued to take the same dose of bichloride every four hours. In future years, if this child should have syphilitic lesions, this early history might be lost sight of, and it might, perhaps, be considered an instance of late hereditary syphilis. It is easy to see how in many instances the early manifestations of the disease may entirely escape observation or be lost sight of. The method of treatment adopted in this case was one which he had worked out some years ago at the New York Foundling Asylum, and he had always found it very satisfactory. It was his usual practice to give a hundredth of a grain of the bichloride every hour, if practicable, and he had not found that it ever produced mercurialization or diarrhœa. In fact, at the Foundling Asylum it often had a salutary effect upon the diarrhœa from which the infants are so apt to suffer.

DR. P. A. MORROW said that the subject under discussion had been comparatively neglected, and that it was only within the last few years that we had begun to appreciate how wide might be the impress of syphilis upon the organism. In many cases it is impossible to get at the history of the individual from birth, and he said he should be very much inclined to doubt whether any patient whatever who manifests the later lesions of syphilis has entirely escaped the earlier symptoms of the disease. Only that day, however, he had examined a girl of eighteen, whose reputation was above suspicion, and who was undoubtedly suffering from hereditary syphilis. She was the subject of many cicatrices, while the soft palate and palatine structures, as well as other portions of the vocal apparatus had been destroyed, and she was completely aphonic; yet, in this instance, it was impossible to get any history of syphilis in infancy.

Dr. Morrow went on to say that he could see no reason why hereditary syphilis should not continue throughout a lifetime, just as the acquired disease is often known to do. It is essentially the same affection. So far as his experience went, there was absolutely no history of the early manifestations of the disease in many cases; but this was, of course, only negative evidence, and it was contrary to his general knowledge of the course of

syphilis to suppose that in any instance the patient had really escaped these earlier manifestations. In conclusion, he referred to the case of an infant affected in much the same way as that mentioned by Dr. Keyes. It was apparently moribund, and it was a wonder that it lived at all. It did live, however, and several weeks later developed into a healthy child. Yet in this instance no medicine whatever was given. He did not wish to depreciate the value of mercury in such cases, but here the mother only was treated.

DR. ROBERT W. TAYLOR said that his conviction was firm that there are always some manifestations in early infancy, though these may be so ephemeral and unaccompanied by distinctive action, that they leave no permanent trace. We may expect the later lesions to appear at almost any time up to about the twenty-first year. In the chapter on inherited syphilis, in Bumstead and Taylor's work, he said that he had placed the normal limit at twelve years (although, as is well known, manifestations of hereditary syphilis occasionally show themselves at a considerably later period), for the reason that he feared that other affections might be confounded with inherited syphilis, which is so comparatively rare at these later ages. Dr. Taylor said that in his work published in 1876, he was the first in America to call attention to the bone lesions of syphilis, and to bring them out of the slough of so-called scrofula. All the way up to the age of puberty we may expect the later manifestations, but when we get beyond the twenty-first year it is pretty hard to say that you are dealing with hereditary syphilis. As a rule, the activity of the lesions occurs before the tenth or twelfth year. Dr. Taylor said that he could not agree with Dr. Keyes in regard to the comparative lightness of syphilis in old people, for in his experience he had found it exceedingly severe and troublesome in such subjects.

DR. L. BOLTON BANGS said that he was in accord with the other speakers in regard to the question at issue. His own observation had been, that almost invariably by careful inquiry and investigation he was able to find some history of previous symptoms; and he mentioned a case of late tubercular syphilide of the face, in a patient twenty years of age, in which he found that there had been unmistakable signs of syphilis in early childhood.

DR. CHAPIN mentioned the case of a child of four years in which syphilitic periostitis, affecting both tibiæ, appeared, apparently without any previous manifestations of the disease, as the patient had been carefully watched from birth by its parents. He agreed with Dr. Keyes as to the importance of the soil into which the syphilitic infection was introduced, and said that he had known of many syphilitic infants with snuffles and mucous patches who were fat and robust, and seemed to thrive on the disease. As to the later lesions, occurring in individuals beyond the age of ten or twelve years, he thought they might as well be called scrofula as syphilis. If there were no typical lesions of syphilis present, it was his practice to put the patient on codliver oil and other tonic treatment, as he was unable to tell whether the trouble was really syphilitic or not.

DR. ALEXANDER S. HUNTER related the case of a woman aged eighteen who suffered from extensive destruction of the nasal bones and soft palate, which he believed to be due to hereditary syphilis. He had had the opportunity, however, of interrogating those who had been with the patient from infancy, and they positively stated that there had been no manifestation of the disease until she was fifteen. Still, it was, of course, certainly possible that they might be mistaken on this point.

DR. L. EMMETT HOLT related cases in his experience and said that he thought it the easiest thing in the world for the earlier manifestations of syphilis to be overlooked. He then called attention to the importance of enlargements of the epitrochlear glands as a diagnostic sign of the disease. Although this condition may be due to other causes, in his experience very few cases of syphilis occur without the enlargement of these glands.

THE PRESIDENT said that when syphilis occurs at birth it is not always easy to recognize positively. There is sometimes great difficulty in distinguishing between a syphilitic and a rachitic bone, or rather cartilage, and particularly when the ribs are affected. If the difficulty is great then, at this early period, it is still greater later on. It is a fact that where a number of children are born in a syphilitic family, the manifestations are apt to become less and less marked in each successive child, and the disease may at last be indistinguishable from the symptoms of so-called rachitis or so-called scrofula.

In regard to the age at which hereditary syphilis first makes its appearance, it is a peculiar fact that the cases first occurring in adolescents or adults are all reported by the older writers, of twenty-five, thirty, or forty years ago. It does not appear that any of the later writers mention any such cases. Thus, Burke says that he never saw one, and Diday, who said the same thing thirty years ago, is still of the opinion that such cases do not occur. Having referred to other authorities, Dr. Jacobi said that probably one reason why the earlier manifestations were apt to be overlooked in former years was on account of the universal use of calomel (an antisyphilitic remedy) in all the diseases of children. Personally, he said he had seen a few cases of late hereditary syphilis. The oldest of these patients was thirteen when the late lesions presented themselves; but in this instance it was easy to trace the disease back to infancy.

DR. STURGIS said that he had for the most part reserved an expression of his own opinion until the close of the discussion. What he meant by the late lesions of hereditary syphilis were those occurring after the age of five years, and he believed that such late manifestations did not occur without previous symptoms. He mentioned the case of a patient of seventeen who was sent to him for diagnosis with a cold inflammation of the knee-joint, which had resisted all forms of treatment. On careful examination he was able to detect traces of an old keratitis and otitis. The children in whom these late lesions are found are apt to be born apparently healthy, and when the earlier manifestations do occur they may escape notice and receive no treatment. It is in the contracted cases that the later lesions are most liable to make their appearance. At the age of five or six years we are likely to have punctate interstitial keratitis and disease of the joints, ears, etc., and nothing will be found to do any good until iodide of potassium is resorted to. Under this treatment the child usually gets well rapidly. At ten there is apt to be another outbreak of trouble, and about the age of puberty the most serious explosion usually occurs. After the age of twenty-five the disease will generally be found to be acquired. If a patient over

this age presents himself with the earlier symptoms of syphilis we can always suspect that the disease is acquired. The first manifestations of the inherited disease are most likely to show themselves within three months after birth, and always do so within twelve months.

PHILADELPHIA NEUROLOGICAL SOCIETY.

Stated Meeting, February 27, 1888.

THE VICE-PRESIDENT, CHARLES K. MILLS, M.D., IN THE CHAIR.

DR. WILLIAM OSLER reported the following case of

ENLARGEMENT AND CONGESTION OF THE RIGHT ARM FOLLOWING EXERCISE OF ITS MUSCLES.

J. B., aged forty-eight, white, a robust, vigorous-looking man, applied at the University Hospital on November 4, 1887, complaining of swelling of the right arm when he worked.

His family history was good, and he had always been healthy with the exception of several attacks of sciatica, which he had suffered with lately. He was married and had five children, all healthy. When he was young he had had smallpox. He entered the Navy in 1861 and left it in 1863, and has been a storekeeper ever since. He had gonorrhœa in 1858, but there was no history of syphilis. About two days before he applied at the hospital he began to work as a carpenter, but had to give it up in two or three days on account of the swelling in the right arm. The arm also became tender and blue, but on raising it over his head the swelling and dark color would disappear. There was no history of sprain or injury, and otherwise he appeared to be in excellent health.

Before exercise the measurements were as follows: Right arm, 11.4 inches; forearm, 11 inches; left arm, 10.25 inches; forearm, 11 inches.

The patient was a well-developed, well-nourished man, with chest well formed, sternum a little prominent over manubrium, subcutaneous veins somewhat prominent, those over the anterior aspect of the left shoulder more than the right. His pupils were equal. The heart apex beat was just visible below and inside the nipple. There was dulness at the lower border of the fourth inside nipple line, and the right border of the sternum. The sounds at the apex were clear; first sound at the base somewhat feeble; second distinct, not specially ringing or metallic; and not more distinct toward the right than the left clavicle; no pulsations in the vessels of the neck and no murmur. Radials were equal; no atheroma; no increased tension, and no stiffness in the vessel wall were apparent. The right arm and hand looked larger than normal; and when at rest the skin was the same color in both; the muscles were well developed; the panniculus was the same on both sides. There was no distention of the veins, and no œdema. The brachial artery could be easily felt, and the axillary artery was not very deep on either side. No difference in the pulsations of the two axillary arteries could be detected, and no murmur could be heard in either.

After exercise the measurements were as follows: In a few minutes the right arm measured 11¼ inches; forearm, 12½ inches. It became livid; there was capillary injection, and the distended veins felt like cords. The radial pulse was only just perceptible. Auscultation of the axillary artery gave a distinct murmur not audible on the other side. When the arm was held up the congestion would disappear in a few minutes. There was a feeling of fulness, but no pain. Deep percussion in the upper axillary region was negative. There was no enlargement of the axillary glands; the expansion at the apices was equal. No pain was experienced on deep pressure in the neck. The side of the face did not flush with the arm, and the opposite side was not affected. Percussion was the same on both sides behind.

Dr. Osler wished to place this case on record, as it presented very unusual features. He thought at first that the condition was due to obstruction, perhaps from pressure, on the subclavian or axillary veins, or possibly occlusion with reëstablishment of a collateral circulation sufficient for the ordinary blood flow which occurs during active use of the muscles. There was, however, no evidence of any such obstruction, nor were the veins of the shoulder-girdle distended. The glands were not enlarged; there was no subclavicular dulness, or evidence of disease at the right apex. The condition had remained unchanged during the four months in which the patient had been under observation. He was now more inclined to believe the condition one of faulty innervation of the vessels of the arm during exercise, a defect in the local regulating mechanism controlling the supply and outflow of the blood, the circulation of which is, as we know, enormously increased by contraction of the muscles.

DR. JAMES HENDRIE LLOYD presented the following

REPORT OF A CASE OF RAPIDLY FATAL EXOPHTHALMIC GOITRE.

On August 12th he was summoned to a case which was described as cholera morbus. The patient was a single woman, aged thirty-nine, who had been suffering for some hours with diarrhœa and vomiting. Pulv. opii and plumbi acetat. were prescribed. On the following day the diarrhœa was checked, but obstinate, persistent vomiting continued. This vomiting was quite remarkable, allowing not a morsel of food or even a small quantity of water to remain in the stomach. A careful physical examination failed to detect any direct cause for this. There was slight tenderness in the epigastrium, but no hardness or evidence of any growth; no enlargement of the liver or spleen; no evidence of hernia; no abdominal pain, or any tympanites. A very marked derangement of the vascular system was, however, detected. The whole abdominal aorta to its bifurcation was throbbing intensely, with a pulsation somewhat expansile. The heart's action was rapid, but there were no intracardial murmurs. It was now observed that the patient's eyes were very prominent and staring, which symptom had escaped observation at the first visit on the preceding evening (possibly due to the poor light in the room). Further examination revealed a much enlarged and rather soft thyroid gland.

Careful inquiries were now made of the parents and near relatives about the patient's previous health. They had regarded her as a perfectly healthy woman up to this attack. They had, to be sure, noticed the altered appearance of her eyes, but it had not made much impression upon either them or her, and had not been of long duration. She had had a spell of illness about six months previous, the exact nature of which he could not

determine, but it had been accompanied with some irritability of the stomach and prostration (as she recollected). Since then she had been apparently healthy, bright, and active; had not complained of dyspnœa; and had been out on the day of the onset of the so-called "cholera morbus," for which he had been called to her. The vomiting continuing as the most distressing symptom, a carefully regulated diet was ordered, and tinct. ipecac. gtt. ij was ordered every hour. The pulse was beating as high as 100 per minute.

The patient passed a restless second night. In the morning the vomiting was somewhat relieved, but not gone. The prostration was growing worse, and the case had assumed a threatening aspect. The pulse had risen to 170. Cyanosis of the hands and feet was observed. Consultation was now held with Dr. W. G. Porter, who concurred in the diagnosis. Calomel was ordered in one-half grain doses every hour; ex. opii, gr. ½, by suppository every two hours until quieted; digitalis, which had not been given because of the extreme gastric irritability, was also determined upon; brandy, as much as the stomach would bear. At the evening visit the pulse was found, as nearly as it could be counted, 70 to the third of the minute, 210 per minute. The vomiting had ceased. Ordered one-half ounce of milk, with which tr. digitalis, ♏. x, was to be put, every half hour, the digitalis to be given only every hour after the fourth dose. Collapse was imminent; the patient had had several fainting spells. On the morning of the third day the pulse had fallen to 160, apparently under the digitalis. Dr. Porter again saw the patient. Ex. bellad., gr. ⅓, was added to the suppositories. Later that day the patient's pulse again failed. At the last visit the heart was beating in a very tumultuous way, and no pulse was perceptible at the wrist. The mind was perfectly clear. She died at the end of the third day of her illness.

The autopsy in this case was, unfortunately, not complete, owing to the jealousy of the family, who refused to allow the skull-cap to be removed. He therefore reported it more for its clinical interest than for any light it throws upon the pathology of this interesting but obscure disease. The examination was made by Dr. Dock, in the presence of Dr. Porter, Dr. J. H. Musser, and himself. The heart was a little dilated in the left ventricle, and slightly hypertrophied. The lungs, kidneys, and suprarenal capsules were normal; the liver was not abnormally fat. The stomach was slightly congested, due probably to the excessive vomiting. There were no other abnormal appearances in the chest or abdomen, which were alone opened.

It may be noted that this patient had had urticaria, a fact recorded by Dr. Bulkley[1] in two cases of the same disease. The special interest which attaches to this case, however, is its very acute character and rapidly fatal termination; for while there was some evidence of the disease having been making insidious approaches for several months, it had not impressed its presence upon the notice of either the patient or the family until it culminated in a violent crisis, which quickly deprived the woman of her life.

DR. WM. OSLER said that these acute cases of exophthalmic goitre are rare. Were any mental symptoms present? Recently, in Dr. Henry's ward in the Philadelphia Hospital, was a case of this disease, in which acute symptoms suddenly developed, and death took place with marked mental trouble.

DR. J. H. LLOYD said that in his case the mind was perfectly clear, nor was there the slightest hysterical character about the symptoms. The patient was naturally much agitated over her condition.

DR. W. B. JAMESON made the following remarks on a case of

CARDIAC ANEURISM FROM AN INSANE MAN.

The heart which he exhibited was from an insane man who died in Dr. Lloyd's wards in the Insane Department of the Philadelphia Hospital; and it was through his courtesy that he was able to present it. The man was fifty-six years of age, a native of Switzerland. He was probably a priest, but for several years before admission to the hospital was engaged as a teacher. He had no friends in this country, and it was impossible to obtain a definite history. He was arrested on the streets and sent to the hospital. When admitted he was in an excited state; had evident delusions of persecution, believed that his food was being poisoned, and also had hallucinations of sight and hearing, and would often sit for an hour at a time talking to some imaginary individual. At times he was excited and would go about the wards declaiming to imaginary audiences. He would often preach, and sometimes chant. His physical condition was good. No physical lesions were discovered on admission. The heart sounds were clear, distinct, and without murmur. It was thought that there was possibly a pleural friction sound, but this was not definitely determined.

When Dr. Jameson went on duty in the Insane Hospital six months ago, the man was apparently in perfect health. He was quiet, speaking pleasantly when spoken to, but nothing more. He was well advanced in dementia, although perfectly cleanly in his habits. One day while Dr. A. A. Stevens and Dr. Jameson were in an adjoining ward, they were summoned to see this man, who was said to be dead or dying. They found him lying on the floor absolutely pulseless, face white, extremities cyanotic and cold, and respiration gasping. Brandy was given and ether hypodermatically. He was then put in a bath with the temperature of the water at about 117°. He shortly improved, became quite rational, and talked clearly. He complained of no pain whatever. He was kept in the bath three-quarters of an hour, when he began to sink, and was taken out and soon died.

Three hours after death the autopsy was made. The brain showed nothing special. There was nothing of interest found in the abdominal cavity. When the first costal cartilage was cut, blood gushed out, rising a distance of at least two inches. The whole mediastinal space was filled with fluid and partially coagulated blood. Extensive pleural adhesions, more particularly on the right side, were found. The space that was left was filled with blood. The total quantity was estimated at about two pints. The aorta was examined carefully with the parts in place, but nothing abnormal was found. The pericardial sac was found to be one-third filled with fluid blood. An aneurism was found at the apex of the right ventricle, and just at the septum there was a small opening where a rupture took place. The opening in the pericardium was not positively located.

[1] Hammond: Diseases of the Nervous System, p. 812.

In looking over the literature, Dr. Jameson found but one or two references to the subject. One case of rupture of the left ventricle was reported in the *American Journal of Insanity* for January, 1885. In this article reference is made to three other cases which had been reported in the *Edinburgh Medical Journal* for February, 1884. In all these cases the patients were about seventy years of age.

In this case there was no atheroma of the aorta. There was an ulcerated condition along the lateral border, also on a spot about the epicardial surface, three-fourths of an inch broad by one inch long, which presented the same appearance as the aneurism. Whether this spot was connected with the ulcer inside he could not say.

DR. WM. OSLER said that it is very unusual to find aneurism of the right ventricle of the heart. This condition is most common on the left side. The majority of aneurisms are the result either of local weakening, due to pericarditis, which is the less frequent case, or to a fibroid condition of the left apex. There is one other condition which may lead to the rapid production of aneurism of the heart, viz., myomalacia or anæmic softening, due to arterial changes. He would suggest that sections made from this locality might throw some light on the nature of the condition. The fact that we have in the immediate vicinity of the aneurism another spot of disease, would seem to point in this direction.

CORRESPONDENCE.

THE GALVANO-CAUTERY IN THE TREATMENT OF ENLARGED TONSILS.

To the Editor of THE MEDICAL NEWS,

SIR: In THE MEDICAL NEWS of March 10th, I notice the report of a paper read by Dr. Frank Hamilton Potter before the Medical Society of New York, on "The Galvano-cautery in the Treatment of Enlarged Tonsils." It embodies, I think, the experience of the majority of those who have *had* experience in the matter. There has lately been a great deal of literature on the subject in both home and foreign journals, but there are a few points deserving of mention which I have not seen dwelt upon sufficiently.

1st. As to pain. The fact is that while many tonsils may seem utterly devoid of sensation when hypertrophied, others, on the contrary, are quite sensitive to the application of the hot wire. Often, in the same patient, one tonsil may be cauterized freely with total immunity from pain, while the other is so sensitive as to require the application of cocaine, which, I think, should be avoided in the throat, if possible. I think most operators will agree with me that it is not always a "painless operation" as Dr. Potter sums up.

2d. As to the number of ignipunctures made at one sitting, I had the advantage of Dr. Knight's personal direction before he read his paper at the last meeting of the American Laryngological Association. At that time and since then, I think, he has limited the number of punctures to at most five or six at one sitting. (I only write from memory, and may be mistaken.)

Since then it has been my custom to regulate the number of punctures almost entirely by the size of the tonsil and the sensitiveness of the patient to the application of the hot wire. Whenever I have a comparatively insensible organ I make enough punctures to cover the whole tonsillar surface with a slough, even sometimes burning away small projections of tissue altogether. I have used the cautery, with three or four exceptions, for the last nine months in every case of enlarged tonsil I have seen, that number being the proportion usually seen in a throat clinic, for that time averaging 1200 to 1500 new patients yearly, and many times in private practice. With possibly one or two exceptions I have never seen any serious reaction. Occasionally the patient's throat would be very sore for part of the next day, but this has seldom lasted more than two days at the most. One case, I remember, complained of a sore throat for as long as five days. Another had an intervening quinsy, which, however, did not begin until two days after the operation, and may have been simply a coincident. Usually, most reaction is observed in those with sensitive tonsils even if only slightly burned—and mostly after the first sitting—the succeeding operations being followed by little pain.

Of course, this radical procedure can only be adopted at first when the tonsil is still large, because after most of the tonsillar tissue has been destroyed a sensitive area is reached near the normal mucous membrane, where pain always follows any deep or extensive cauterization. When this stage is reached, longer intervals should be observed, as there is always more or less infiltration of the surrounding mucous membrane which will disappear of itself if left untouched.

3d. As to its use in children. Lately I have ceased operating in patients under the age of twelve with the cautery. It is nearly always unsatisfactory. "Kindness and patience" will often lead the little ones to submit for one or two sittings, by which time you have changed the size and shape of the tonsil so that a tonsillotome can only be used with difficulty, and ignipuncture has become of exceeding difficulty owing to the want of control that even the most tractable child has over its pharynx. You now have a ragged mass of tissue between the faucial pillars full of holes and lodging places for food and secretions.

A tonsillotome, a strong assistant, and a sensible guardian of the child are all a moderately deft operator needs to settle the whole affair of enlarged tonsils in two minutes, without "general anæsthesia" and the danger of blood in the trachea of an insensible patient. I think there are no cases on record of serious—at least fatal—hemorrhage under the age of twelve. I believe that those who see a large number of cases of enlarged tonsils each year will soon discard tonsillotomy in adults where ignipuncture is possible. In many cases the latter is almost an absolute necessity owing to the diffused condition of the tonsillar tissue, and also, rarely, to the size of the mass to be removed.

4th. As to the number of sittings. I have never met with a case in which the hypertrophied condition was not removed by at most fifteen sittings if properly carried out. Usually half the number is sufficient.

To conclude, recurrence of the hypertrophy is occasionally seen where the tonsil has not been completely removed, or at least restored to its normal proportions. When the two operations of ignipuncture and tonsillotomy are explained to the patient with the advantages and disadvantages of each, I have yet to see the patient

who preferred the latter, though one after submitting to both said he preferred tonsillotomy.

JONATHAN WRIGHT, M.D.

73 REMSEN ST., BROOKLYN, N. Y.

March 12, 1888.

NEWS ITEMS.

The Illness of the Emperor of Germany.—The *British Medical Journal* of March 10, states that it learns by special telegram from San Remo, that the general condition of the Emperor Frederick is now very good. The irritation of the windpipe that was so troublesome for some time, has almost entirely disappeared, but there is some increase in the swelling within the larynx. We may add, that we are able to confirm this comparatively favorable account by independent information which we have received from a perfectly trustworthy source. We are in a position to state that neither Sir Morell Mackenzie nor Mr. Hovell is inclined to share the pessimistic views recently made public, though they do not, of course, deny the possibility of the disease proving to be cancer.

With regard to a rumor which has been largely current in society, and which lately found most unseemly expression in a French contemporary, we have the fullest authority to deny, in the most emphatic manner, that there is any ground for such a suspicion. We may repeat that the recent sufferings of the illustrious patient have been almost wholly due to the irritation caused by an ill-fitting tracheotomy tube. The operator, as was perhaps natural under the circumstances, appears to have been rather nervous, and the windpipe was opened some way to the right of the middle line; hence the difficulty of finding a suitable tube. Sir Morell Mackenzie, assisted by Mr. Hovell and Dr. Evans, the well-known dentist of Paris, spent the greater part of one day in constructing a tube of a shape specially adapted to the requirements of the case. Since this has been worn the Emperor has been more comfortable in every way; he has been able to sleep, the cough has diminished, and the expectoration has almost lost the blood-stained character which excited so much alarm.

It is satisfactory to see from the official bulletin lately published in the *Reichsanzeiger*, that the medical men are now in substantial agreement as to the nature of the disease. We do not think, however, that the inference which has been drawn from this in certain quarters, that Sir Morell Mackenzie has abandoned his recently published opinion on the subject, and adopted the less favorable view of some of his colleagues, is altogether warranted. Although the result of Professor Waldeyer's microscopical examination has not been published, we have reason to believe that it is such as to admit of a favorable interpretation.

An Illustrated Catalogue of the Army Medical Museum.—Dr. Billings, of the Army Medical Museum, will signalize the removal to the new building near the National Museum by the preparation of an illustrated catalogue. It will contain drawings of all the crude and wet specimens of tumors, cancers, gangrenes, etc., and other objects on exhibition in the museum, besides micro-photographs of morbid tissues prepared by Dr. W. M. Gray, the microscopist of the Surgeon-General's Office. Each picture will be accompanied by a short description of the object illustrated, but there will be no discussion of theories. The work, when completed, will constitute a complete pathology, and will be a most valuable text-book for students and physicians.—*Science*, March 16, 1888.

Successful Disposal of Garbage at Milwaukee.—Martin, Commissioner of Health, for Milwaukee, writes to the *Sanitary News* of March 10, 1888, reporting the success of the disposal of garbage by cremation, as follows:

Perhaps Milwaukee is not so favorably situated as some of our sister cities for the safe disposal of our refuse material, and that may be one reason why we have been forced to take vigorous measures to consume ours. Other municipalities have entered on a course of experiments involving large sums of money, and will, at the end of these experiments, be no nearer the solution of the problem than when they were first undertaken. With us it is quite different. Last summer we found that fully one-half of our garbage was water that could be, and was, extracted by a powerful press, and, as we know of no better or cheaper method of getting rid of this water, than by evaporation, and as we do not expect that garbage like ours will burn without fuel, so our furnace was erected and every day, for more than five months, our garbage has been consumed to a dry, inodorous ash; with us, it is no longer an experiment, but an accomplished fact, and we claim to be the first city that is to-day destroying her refuse material by fire. A test of the cost of consuming the garbage was made on December 27th, with the following result: The amount received and consumed was 40,215 pounds, and the fuel required was 5000 pounds, being 4.3 cents per hundred pounds of garbage consumed, a result highly gratifying when we consider that on that date there was a large quantity of snow and ice mixed with the garbage. This department entered into an agreement for three years with the contractor to burn all garbage delivered at the furnace by order of this office, being that collected by men employed for that work. The wholesale houses, grocers, commission houses, and others of that class, take their refuse to the same place. The contractor is also required to burn all small dead animals, and the furnace is in actual operation during this season, the worst of the whole year, only from eight to ten hours daily.

The Adirondack Cottages, at Saranac Lake, New York, for the treatment of pulmonary diseases, in its third annual report, presents a very gratifying record. During the year, fifty-one patients have been treated, with the following results: no deaths have occurred; eleven have lost ground more or less rapidly, most of them having returned to their homes; twelve have been slightly benefited, while twenty-three have so greatly improved as to be able to resume their various occupations, and five have been cured. On December 11 the weighing of patients showed the highest average gain yet noted. For seventeen patients (the entire number then in the institution who had been under treatment over two and a half months), the average gain per person was thirteen and one-eighth pounds.

Practical Courses in Dermatology at Hamburg.—We are requested by Dr. Unna, of Hamburg, to announce that he will begin a course in dermatology, for physicians, on April 1, 1888. This instruction will embrace the his-

tology, bacteriology, diagnosis, and therapeutics of skin diseases, and will be illustrated by the resources of Professor Unna's clinic and policlinic. Further information may be obtained by addressing Dr. P. G. Unna, Dammthorstrasse 15, I., Hamburg, Germany.

A Sanitary Convention will be held at Manistee, Michigan, June 6 and 7, 1888, under the auspices of the State Board of Health.

The Decision by the Court of Claims in the case of Major John S. Billings, surgeon, United States Army, effectively disposes of the pretension of the accounting officers of the Treasury Department to dispute all orders of heads of departments involving the expenditure of money. Surgeon Billings was in 1881 and 1884 sent to Europe by the Secretary of War as a delegate to the International Medical Congress. He made a charge for mileage for distances travelled in Europe. The Court of Claims holds "that if there were any doubt of the authority of the War Department to order Major Billings to travel abroad on the public business intrusted to him, the long-continued practice of sending officers abroad on like business and paying their mileage from the Treasury through the accounting officers without objection would be strong reason for upholding the legality of such orders. But we do not think the question admits of doubt. The orders were legal and cannot be controverted by any other executive branch of the Government." The court further holds in specific terms that "the accounting officers of the Treasury have not the burden of responsibility cast upon them of revising the judgment, correcting supposed mistakes, or annulling the orders of the heads of departments." Again the court says: "It would be a novel principle to refuse payment to the subordinates of a department because their chief, under whose direction they had faithfully served the public, had mistaken his own powers and had given an erroneous construction of law."

A Prize for the best Portable Hospital.—A prize has been offered by the Empress of Germany, for public competition, of about $1500 for the best essay on the furnishing and carrying on the work of a portable hospital for sick and wounded persons; there will be also three gold and nine silver medals. The award will be made next September at the Brussels Exposition, and the German Association of the Red Cross will have the management of the competition. The competitors must send in their exhibits before August 15th. This is the second grand prize given by the Empress in this direction of improving field-hospital service; the former one having been awarded in 1885 for portable hut-hospitals.—*British Medical Journal*, February 25, 1888.

The Pollution of Streams.—The *Sanitary Engineer* of March 10, 1888, writes as follows on this subject:

The first and main consideration is as to whether the stream is or is not used as a source of drinking-water supply. If it is to be so used, it is certain that our present knowledge as to the limit of sewage impurity which may be considered permissible is very vague and wanting in scientific precision, and that there is much need of a series of careful observations on the effect of time and distance of stream-flow on diluted sewage, and especially on such pathogenic bacteria as the sewage of a community is liable to contain. The action of the ordinary bacteria of a sewage effluent is not harmful, but beneficial, and it is probable that there are other forms of bacteria, not contained in large numbers in ordinary sewage, but which are specially valuable as purifiers of such material and which exist in great abundance in those soils in which oxidation and nitrification are rapidly produced.

It is quite possible that these oxidizing bacteria might be cultivated in large quantities and added to sewage, but to enable them to flourish and do their work it is necessary that they should have a large supply of oxygen. This they have in soils which are not allowed to become too moist, but they do not have it in water, unless by agitation or in some other way air is mingled with the water.

Even with our present imperfect knowledge there is one fact which is tolerably clear, and that is that any stream of small or moderate size which lies in the midst of a populous and growing district is polluted, and will probably become more polluted, that this process is one of gradual increase, and that while we may not be able to predict a definite time in which it will become a nuisance or dangerous to health, we can see that it will become so sooner or later.

Typhoid Fever and Drinking Water in Vienna.—The *Sanitary Engineer* writes that the evidence is very strong that typhoid fever in Vienna has been connected with the water-supply, and that those who make use only of the present general supply run very little risk of taking this disease. Cases are now rarely seen in the hospitals, and when they do come it is almost invariably from some suburb to which the general supply has not yet been extended. Dysentery has also nearly disappeared, no deaths from this cause having been reported for the years 1881–86, and the whole statistical record gives excellent evidence as to the good effects produced by an unpolluted water-supply.

The Hygiene of Railway Operatives.—The Directors of the Great Northern Railway have recently issued an order to their firemen and engine-drivers which should be the initiation of similar regulations throughout the various railways in the country. No fireman or engine-driver is to be allowed to go on duty unless he has had at least nine hours' rest. Such an instruction should not be necessary, but being necessary, its issuance is no less a boon to the men than a source of safety to the public. —*Sanitary Engineer.*

The Contamination of Water by Lead.—There has been quite a lead-poisoning scare in Sheffield, England, which has called out the usual number of theories and suggestions. Among others Dr. Sinclair White has proposed a simple remedy—namely, filtration through lime—which seems likely to be adopted.

The *Journal of Gas-Lighting* directs attention to a letter recently addressed to the *Sheffield Telegraph* by Mr. Alfred H. Allen, F.I.C., F.C.S., President of the Society of Public Analysts, in which some suggestive remarks are made. The proportion of lead which is generally considered to render water seriously objectionable is one-twentieth of a grain per gallon; but Mr. Allen says there is some reason to believe that in cases

in which serious effects have been observed in Sheffield, the proportion has considerably exceeded this limit. It must not be supposed, however, that there is any danger in drinking a glass of water containing such a minute proportion of lead. It is not the single dose or a dozen doses which will produce any ill effects, but the constant use of such contaminated water. Lead is a cumulative poison, and each successive dose becomes stored up in certain organs of the body until the poisonous effects ensue. Further, it must not be supposed that every one is equally susceptible to the effects of lead, there being a great difference in this respect.

Mr. Allen adduces a striking instance, which came within his own experience of the way in which lead poisoning may occur. A year or two since a member of his family suffered from symptoms which her medical adviser considered to be due to lead-poisoning. The water drawn from the tap the first thing in the morning contained half a grain of lead per gallon, and about half this proportion after being allowed to run. By passing the water through a particular description of carbon filter every trace of lead was removed; but tea made from such pure water was sometimes found to contain 0.75 grain of lead per gallon. Analysis showed that the tea as bought was free from lead, and for some time Mr. Allen was puzzled to account for its presence. It was afterward found that the fur, or deposit, inside the kettle contained a considerable proportion of lead, some of which became dissolved in the water boiled in it. The kettle being replaced by a new one, the symptoms of lead-poisoning disappeared under proper treatment. He attributed the lead in the deposit to a servant having habitually filled the kettle from the hot-water tap, for hot water, it appears, acts on a lead pipe much more vigorously than cold.

It is reported by the Medical Officer of Health (Dr. A, Mackintosh) that from 100 to 150 more people are suffering from lead-poisoning in Chesterfield, England.—*Sanitary Engineer.*

Face Masks, Rouge, and Skin Washes.—The *American Analyst* of March 1, 1888, reports that of the numerous "face masks," "beauty masks," "complexion balms," "medicated pastes," "blooms of youth, beauty, or loveliness," "Lola Montez secrets," not one is good in any respect. The very best is without value. From this they range down to the depths of an injuriousness and ghoulish action. The best consist of an oil, fat, or glycerine, with some perfume, and a trifle of gum benzoin, camphor, or other drying substance. These are simply nasty. Their action is the same as of lard or butter smeared thickly over the face of the user. The rest are dangerous as well as disgusting. They contain the same ingredients as the face powders denounced, and are even more pernicious in their action. Lead colic, lead paralysis, mercurial ulcers, arsenic sores, boils, carbuncles, abscesses, putrid glands, salivation, sudden baldness, and even more serious ills, can be traced to their use, and will invariably accompany that use as long as the human body remains as it is to-day.

Of the rouge preparations, those made from cochineal and madder are harmless. All others are bad, very bad, and horrible. The "eau de vinaigre," "rouge vinaigre," "camphor wine," "red pepper wash," "capsicum elixir," and the like, which depend for their effect upon irritating the nerve corpuscles, are unobjectionable to the physician and the chemist. The new preparations, which are solutions of aniline and other coal tar colors, are poisonous and should be prohibited by law.

There is little or nothing to be said against the washes used to remove pimples and blackheads. They are usually made by dermatologists of good standing, and do their work properly, and in a reasonable time. It is far better, however, to depend upon a fine toilet soap or dilute ammonia, gentle but persistent rubbing, the Turkish or Russian bath, and a piece of lemon. A two weeks' course of the latter will improve any complexion better than all the washes extant, and, more than that, will correspondingly improve the general health.

Disinfection by Sunflowers.—It has been stated that since the sunflower has been cultivated on certain swamps of the Potomac, malarial fever has decreased. At the mouth of the Scheldt, in Holland, it is stated that similar results have been observed. The sunflower emits large volumes of water in the shape of vapor, and its aromatic odor, as well as the oxygen it exhales, may have something to do with the sanitary influence in question.

The Contagion of Leprosy in Minnesota.—The State Board of Health of Minnesota gives out the statement by Dr. Grondold, of Norway, Minn., that "no case of leprosy has ever originated in Minnesota by contagion, and that of all the children of lepers living here, not one has exhibited any signs of the disease."

The Part played by the Skin in "Catching Cold."—The part played by the skin in the contraction of colds, and such diseases as begin with a cold, is well worthy of being scientifically studied, especially at a time when the general acceptance of a germ theory in relation to these diseases has upset all previously formed opinions. This part has been made the object of study by Dr. E. Lier, of Creuznach, and his investigations form an interesting chapter in the recent number of the *Monatsch. f. prakt. Dermatologie.* His conclusions, which may prove suggestive if not instructive, are as follows: 1. The skin renders colds possible simply as the organ of temperature sense, and its action is reflex. 2. The histological and physiological changes in the skin are reflex phenomena. 3. The disposition to colds depends on the degree of the resisting power of the skin. Further consequences are: that the best prophylaxis against colds depends on the skin, and may be brought about by skin gymnastics and stimulating baths. 4. The treatment of these diseases by diaphoretics is not causal, but symptomatic. A rational treatment of febrile diseases consists in the employment of such agents as act on the central organs, morphia, chloral, digitalis, warm or tepid baths, camphor, musk, cold douches, and in the case of infective diseases, antiseptics. He further assumes that where the predisposition to colds is marked, there must be some disease of the skin at the bottom of it all, the symptoms and pathology of which it should be the aim of investigators to discover.—*Medical Press*, February 28, 1888.

Dangers Connected with the Use of Electricity in Medicine.—Steavenson, electrician at St. Bartholomew's Hospital, warns against the careless use of electricity, in the *Provincial Medical Journal* of March 1, 1888, as follows:

The use of the wrong pole in electrical treatment may be followed by most disastrous results; and the chances of the wrong pole being used are very numerous, sometimes even escaping the vigilance of the most experienced. The commutator of the battery may have been arranged wrongly by the instrument maker; the galvanometer may have been inserted on the wrong side of the circuit; the current may have to be arrested during an operation, and the commutator reversed by accident through the negligence or ignorance of an assistant. One operation may have required the use of the positive pole, and the next of the negative, and the necessary alterations in the battery have escaped notice. All these accidents have occurred within the knowledge of the author. I write with a sense of the strongest responsibility when I warn the profession against the indiscriminate use of electricity, and its indiscriminate use by those who have not a thorough knowledge of its action, and of the proper way of applying it, and of the construction of batteries. I have seen part of the mucous membrane of the urethra torn off and followed by profuse hemorrhage by the use of a positive pole in the treatment of stricture. I know of a case where the patient suffered from such extreme collapse after a similar operation, that the surgeon for a time was fearful as to the result. The collapse was produced, either from the current being used too strong, or when strong, suddenly broken. I have been upbraided by a surgeon for advocating the treatment of stricture of the urethra by electrolysis, because in two cases he had set up most intractable cystitis by not cutting off the current after his electrode had passed the stricture, but by passing it on and electrolyzing the coats of the bladder; and yet, when properly performed, electrolysis is the best mode of treating stricture. I have seen a patient disfigured for life by the too energetic use of the wrong pole, in treating a hairy mole on the face. In another case, an abscess or slough was produced in the upper part of the pharynx, accompanied by the most intolerable earache, by the use of the wrong pole in an attempt to electrolyze the Eustachian tube. Most profound collapse has been caused by an assistant uncoupling one of the electrodes after the electrolysis of a uterine fibroid, and before the current had been gradually reduced in strength. Very painful and disagreeable shocks have been produced when treating the same affection, by the battery having been sent home by the instrument maker with the zinc of one couple of elements placed in the wrong cell; and in another instance, by the battery being sent home with the fluid omitted from one cell. A case has been published where, no doubt, the woman's life was in jeopardy by the sloughing of a tumor produced by the use of a too strong current. I mentioned in my paper, read at Dublin, the difficulties, though not serious, which followed the use of the wrong pole in the treatment of lachrymal obstruction. I could greatly extend this list of dangers and difficulties connected with electrical treatment, but I have said enough to show that it should not be undertaken without a thorough knowledge of the apparatus to be used, and the mode of using it.

The Death of Mr. Curling, of the London Hospital.—Thomas Blizard Curling, F.R.C.S., F.R.S., Consulting Surgeon to the London Hospital, died on March 4, 1888. He had been on the staff of the London Hospital for many years, and had enriched surgical literature by frequent contributions, among which are his "Original Observations on the Association of Duodenal Ulcers with Cutaneous Burns." His larger works were a prize essay on "Tetanus," "Diseases of the Testis," and "Diseases of the Rectum."

Death of Augusto Michellacci.—Michellacci, the foremost of Italian dermatologists, died in Florence March 13, 1888.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT U. S. ARMY, FROM MARCH 13 TO MARCH 19, 1888.

BAXTER, J. H., *Colonel and Chief Medical Purveyor.*—Will proceed to Augusta Arsenal, Ga., on public business.—*S. O 62, A. G. O.*, March 16, 1888.

STERNBERG, G. M., *Major and Surgeon.*—Ordered to proceed to Brunswick, Ga., on official business, and, upon completion of the same, will return to his proper station.—*S. O. 57, A. G. O.*, March 10, 1888.

GREENLEAF, CHARLES R., *Major and Surgeon.*—Will proceed to Cambridge, Mass., on official business—*S. O. 62, A. G. O.*, March 16, 1888.

O'REILLY, R. M., *Major and Surgeon.*—Will proceed to York, Pa., and make an examination of Captain Edward B. Rhum, Twenty-first Infantry.—*S. O. 62, A. G. O.*, March 16, 1888.

CROSBY, WILLIAM D., *First Lieutenant and Assistant Surgeon.*—Granted leave of absence for two months, with permission to apply for an extension of one month, to take effect after being ordered to a new station.—*S. O. 60, A. G. O.*, March 14, 1888.

KEAN, JEFFERSON R., *First Lieutenant and Assistant Surgeon.*—Relieved from duty at Fort Sill, Indian Territory, and ordered for duty at Fort Robinson, Nebraska.—*S. O. 56, A. G. O.*, March 9, 1888.

OFFICIAL LIST OF CHANGES IN THE MEDICAL CORPS OF THE U. S. NAVY FOR THE WEEK ENDING MARCH 17, 1888.

RUSH, W. H., *Passed Assistant Surgeon.*—Detached from the Navy Yard, New York, and ordered to the Naval Hospital, Philadelphia, Pa.

STEELE, J. M., *Passed Assistant Surgeon.*—Detached from the Naval Hospital, Philadelphia, and ordered to the Coast Survey Steamer "Bache."

OBERLY, A. S., *Medical Inspector.*—Detached from the Navy Yard, Portsmouth, N. H., and wait orders.

DUBOIS, F. L., *Surgeon.*—Ordered to the Navy Yard, Portsmouth, N. H.

KEENY, JAMES, *Assistant Surgeon.*—Ordered to the Receiving Ship "Minnesota."

DEANE, C. W., *Passed Assistant Surgeon.*—Detached from the Marine Rendezvous, San Francisco, and ordered to the Coast Survey Steamer "McArthur."

AUZAL, E. W., *Assistant Surgeon.*—Detached from the Coast Survey Steamer "McArthur," and ordered to the Marine Rendezvous, San Francisco.

BIDDLE, CLEMENT, *Passed Assistant Surgeon.*—Ordered to the Naval Academy, Annapolis, Md.

THE MEDICAL NEWS *will be pleased to receive early intelligence of local events of general medical interest, or of matters which it is desirable to bring to the notice of the profession.*

Local papers containing reports or news items should be marked.

Letters, whether written for publication or private information, must be authenticated by the names and addresses of their writers—of course not necessarily for publication.

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